

AMERICAN
Cinematographer
★ THE MOTION PICTURE CAMERA MAGAZINE ★

LEONARD KUBINSON
25¢
NEW EDITION 1946



In This Issue
20th ANNIVERSARY
OF SOUND FILMS



MAY
1946



For dramatic lighting... **SUPERIOR 2**

A general-purpose negative stock, Du Pont Superior 2 is particularly suitable for dramatic lighting effects. It combines fine grain with high speed. It provides excellent exposure in both highlight and shadow areas. E. I. du Pont de Nemours & Co. (Inc.), Photo Products Department, Wilmington 98, Delaware.

*In New York: Empire State Building
In Chicago: 225 N. Wabash Avenue
In Hollywood: Smith & Allen, Ltd.*

Features:

- | | |
|--------------------------|------------------------------|
| 1. Extreme wide latitude | 4. Speed |
| 2. Color balance | 5. Excellent flesh tones |
| 3. Fine grain | 6. Uniformity |
| | 7. Extension of latent image |

(Listen to "Carnegie of America," Monday evenings on NBC)

DU PONT
Motion Picture Film



BETTER THINGS FOR BETTER LIVING
... THROUGH CHEMISTRY



***It's still
the most versatile of all
35mm portable cameras***

EYEMO



B&H FILMOSOUND 16mm Sound-on-Film Projector

The new improved Filmosound, now with new coated lens and 1000-watt illumination, is the finest 16mm sound-on-film projector the science of Opti-onics has produced. Sharp, clear pictures; undistorted sound at all volume levels; easier, simpler operation.

Filmosound Library offers every type of film, sound or silent, for rental, lease, or purchase. Catalogs free to all owners of motion picture equipment.



Seven Eyemo models—each with correlated accessories—give you a portable 35mm camera suitable for every field or studio need.

From Eyemo Model K, for quick field work, to Eyemo Model Q, designed for rapid, easy conversion from hand-held spring operation to electric drive and large-capacity film magazines, the "Eyemo family" is unsurpassed for versatility.

For newsmen, travelers, difficult camera angles—everywhere a portable camera is expected to get theater-quality pictures—Eyemo guarantees

that what you see, you get. Write today for illustrated descriptive literature.

Bell & Howell Company, 7148 McCormick Road, Chicago 45; New York 20; Hollywood 30; Washington 5, D. C.; London.



OPTI-ONICS—products combining the sciences of OPTICS • ELECTRONICS • MECHANICS

Precision-Made by

Bell & Howell

Since 1907 the Largest Manufacturer of Professional Motion Picture Equipment for Hollywood and the World

AMERICAN CINEMATOPHIL

THE MOTION PICTURE CAMERA MAGAZINE

VOL. 27

MAY, 1946

NO. 5

CONTENTS

Axis of the Camera (Robert Pattack, A. S. C.)	By W. G. C. BOSCH	153
Psychology and the Screen	By HERB A. LIGHTMAN	160
World-Wide Celebration of 25th Anniversary of Sound Films		162
Survey of Current Progress of Color Kinematography in England	By JACK H. COOTE, F. R. P. S.	164
Through the Editor's Fingers		166
Soviet's "The Great Turning Point"		170
Among the Movie Clubs		172
"Surveying the March Sound Film Supply"	By JAMES H. OSWALD	174
Current Assignments of A. S. C. Members		180

ON THE FRONT COVER John Garfield and Joan Crawford go through final rehearsal for scene in Warner Brothers production of "Hush" Director Jean Negulesco in checked shirt (center), and Director Photography Ernest Haller in light suit beside camera make their final checks before the cameras roll.

The Staff

EDITOR
Walter R. Green
TECHNICAL EDITOR
Emory Hunt, A.S.C.
ASSOCIATE EDITOR
Edward Fyle, Jr.
MILITARY ADVISOR
Col. Nathan Levinson
STAFF PHOTOGRAPHER
Mal Truitt
ARTIST
Glen R. Egan, A.S.C.
CIRCULATION AND ADVERTISING
Marjorie Dean
ADVISORY EDITORIAL BOARD
Frank W. Jackson, A.S.C.
Victor Milner, A.S.C.
Alvin Wyckoff, A.S.C.
Fred Edwards, A.S.C.
Fred Gees, A.S.C.
Dr. J. S. Watson, A.S.C.
Dr. L. A. Ross, A.S.C.
Dr. C. E. E. Moss, A.S.C.
Dr. W. S. Keyton, A.S.C.
Dr. V. E. Stone, A.S.C.

AUSTRALIAN REPRESENTATIVE

McGILL, 175 Elizabeth Street, Melbourne, Australia and New Zealand Agents

Published monthly by A. S. C. Agency, Inc.
Editorial and business offices:
5112 Sunset Avenue, Suite 100
Beverly Hills, California 90216
Telephone: LA 4444

Established 1920. Advertising rates on application. Subscriptions: United States and Possessions United \$1.00 per year; Canada, \$1.25 per year; Foreign \$1.50. Single copies, 15¢ each; members, 10¢. Single copies, 15¢ each; members, 10¢. Copyright 1946 by A. S. C. Agency, Inc.

Entered as second-class matter, Nov. 18, 1937, at the postoffice at Los Angeles, California, under the act of March 3, 1979.

OFFICERS AND BOARD OF GOVERNORS AMERICAN SOCIETY OF CINEMATOGRAPHERS

Leonard Smith, President	Frank Jackson, Exec. V. Pres. and Treas.
Charles Clarke, First Vice-President	Joseph Walker, Second Vice-President
Arthur Edwards, Third Vice-President	Ray Ransohoff, Secretary
George Foley, Sergeant at Arms	
John Arnold	Byron Heslin
John Boyle	John Rein
Leo Gurnea	Leon Shimony
	Sam Fells
	William Scott



MITCHELL **BNC** *Silent*

Truly silent, the **BNC STUDIO MODEL** camera is designed for flexible, noise-free operation.

Lighter, more mobile...the Mitchell **BNC** is universally acclaimed for its smooth, quiet performance. With all controls accessible during operation, even the most difficult shots are speedily obtainable with a minimum of effort.

Engineered in the Mitchell tradition, the **BNC** camera is a product of the skill that has for twenty-five years made the name of Mitchell synonymous with fine motion picture photography.

★ *Eighty-five per cent of all motion pictures shown in theatres throughout the world are photographed with a Mitchell Camera*

**MITCHELL CAMERA
CORPORATION**

Circle Address
"MILCAMCO"

665 NORTH ROBERTSON BOULEVARD, WEST HOLLYWOOD 46, CALIFORNIA • PHONE BR 2-3209

Announcing the

NEW IMPROVED
NORWOOD
"DIRECTOR"
Exposure Meter

With Interchangeable Hemisphere and Keylite Mask



*Providing fast, accurate control
of the Basic Exposure Factors:*

1. KEY LIGHT Intensity

Readings from 0—10,000 foot candles with Key-
lite Mask

2. LIGHTING CONTRAST

3. OVER-ALL EXPOSURE Determination

Readings with the patented Norwood 3-dimen-
sional Light-collector



Now in Quantity Production—\$75⁰⁰ Including Tax

Sold only direct from

PHOTO RESEARCH CORPORATION

15024 Devonshire Street



San Fernando, California

Telephone: San Fernando 6932

ACES of the CAMERA

ROBERT PITTACK, A. S. C.

By W. G. C. BOCO



AS THIS is written the finishing touches are being put to a motion picture that all Hollywood is eagerly waiting to see. It is a picture that has received very little advance publicity, and, amidst the welter of press releases turned out to whet the collective appetite for the usual celluloid offerings, has progressed through several months of shooting and editing unheralded and almost unnoticed.

The reason Hollywood has cocked an eye in pleasurable anticipation at this

particular film is that it represents the efforts, for the first time as writer-producer-director, of a man whose name is believed to be touched by genius; and stars one of Aladdin's fabulous personalities of an earlier era, a man who made motion picture history, and who has chosen this particular vehicle to stage a comeback.

The title of the picture, "The Sin of Harold Diddleback"; written, produced and directed by Preston Sturges. The star, Harold Lloyd. And the man en-

trusted with the job of putting this distinguished production on film, Robert Pittack, A. S. C.

Bob Pittack considers it a stroke of great good fortune to have been chosen by Preston Sturges to film that worthy's first independent production, and he looks back upon this recent experience as one of the highlights of his career as a cameraman.

It was inspirational, he says, to work with two men of such consummate skill; one directing, with deft touches, the sparkling dialogue and clever situations in a script he himself wrote and of a type he has already made famous; the other, an acknowledged master of comedy in all its ramifications, contributing prodigiously from his vast experience.

It is a pleasure, Bob goes on to say, to work with a director like Sturges. His attention to camera detail is enormous and he has a highly developed understanding of the cinematic medium. He knows exactly what he wants and will go to any amount of trouble to get it. When "The Sin of Harold Diddleback" hits the screen, Bob is sure that it will permanently establish the brilliant and versatile Sturges as one of the indelgately talented writer-producer-directors of this era, and re-establish the ace and only Harold Lloyd with his old public as well as with a new generation of moviegoers to whom the name of the famous comedian is only a legend.

Mr. Sturges, who "knows what he wants," showed excellent judgment in selecting a cameraman with the patience for taking infinite pains, of great technical skill based on a clear understanding of his job, and with a sincere approach to his work; a man whose background reflects the experience of 27 years of movie making.

This experience began in 1919 when Bob Pittack first came to Hollywood. He was on a visit from Seattle at the time and had no intention of staying. But he owned a car, and someone offered him a job as an assistant cameraman.

It wasn't everyone who had a car in those days, and the possession of one by Bob made him a most desirable cameraman. Universal grabbed him and his car and put him to work under Bill Edwards. With a salary of \$20.00 per week and rental for his car Bob was probably the highest paid assistant cameraman in Hollywood at the time.

Bob decided he liked the picture business. When Edwards left Universal to go to work for Robertson and Cole at the Lois Weber Studios at Santa Monica Boulevard and Vermont Avenue, Bob went with him. Under that banner they photographed Pauline Frederick's starring vehicles.

But it was on his next move, to Famous-Playen-Lasky, that he began to get the intensive training which is the necessary background for all those who would become Aces of the Camera.

At Famous-Playen-Lasky Bob came under the supervision of Karl Brown, a

(Continued on Page 167)

PSYCHOLOGY and the SCREEN

By HERB A. LIGHTMAN

WE are prone to think of film production as a blending of mechanical and creative arts. It is surely all of that, but there is something more that goes into the making of a successful film—an intangible essence that reaches out to fingers and makes them tingle or cry, cheer the hero, hiss the villain (sub-consciously, at least). It is something you cannot put your finger on, but it must be present if an audience is to react appreciatively to a motion picture. This shiftable force is based upon an understanding of people and their actions, how they think and react, why they do what they do. We have come to know it by the name *psychology*.

Once a step-child in the realm of pseudo-science, psychology has in this century reached scientific maturity and has incidentally become an integral element of motion picture-making. Star names, smooth production, lavish sets

are no longer sufficient to guarantee the success of a film. The novelty of lavishness has worn thin, and producers now realize that they must give an audience something it can "hook its teeth into," a story of substantial fabric based on sound psychology. This is especially significant in view of the fact that film audiences, especially in America, do not go to motion picture theaters to think. Rather, they go with the expectation of taking part in a vicarious emotional experience. As a result, our cinema appeals not to the intellect, but to the emotions.

Film production consists of many varied elements: script, camera, direction, sound, music, editing, etc. We may visualize the film itself as a symphony with all of these elements as instruments playing together to produce a harmonious dramatic pattern, and balanced to extract certain empathic responses from

the audience. The point of balance is often exceedingly fine. Sometimes in the midst of a tensely dramatic scene an audience will begin to laugh for no apparent reason. This inappropiate reaction can always be traced to faulty psychology in some phase of production. That is why intelligent (and successful) producers now plan their productions with careful attention to correct psychological approach.

Psychology applied to the screen acts as a kind of "touch sense." The audience should react to it without being conscious of the machinery behind the screen. Also, of too frequently used, psychological touches tend to lose their effectiveness. "Citizen Kane," directed by Orson Welles and strikingly photographed by Gregg Toland, A.S.C., is technically one of the finest pictures ever made. Violating all rules of cinematic convention, it introduced many original techniques to the screen and leaned heavily on psychological approaches to gain audience reaction. However, there were sequences when too many of these devices were used at the same time, vying for audience attention in such a way as to cloud the dramatic issues presented. Too much of a good thing weakened the impact of an otherwise masterful film.

Association of ideas plays an important part in stimulating audience reaction. Each member of an audience will tend to associate certain phases of the plot with episodes out of his own experience, and will then accept the various ideas and stunts that follow, reacting to them and experiencing a state of suspense concerning the outcome of separate sequences and the film as a whole.

Most really effective films are conceived in an overall key that applies to all phases of production, thus achieving "mood" that is unified and consistent. In "A Tree Grows in Brooklyn" every mechanical and dramatic technique was keyed to present a picture of harshly realistic tenement poverty softened by family affection. The camera treatment bordered on the documentary, direction and action were kept simple, and the settings were authentically "Brooklyn"—not merely a designer's version of what Brooklyn must be like.

It is the sustaining of strong mood that holds an audience firmly in grasp and leads it to accept a pattern of facts which, if presented singly, would not be credible. Grossly inept handling of these values in the past has resulted in a swollen American aversion to motion picture themes based on fantasy. And yet, Americans are basically an imagi-



"The Strange" makes masterful use of silhouette and shadow in establishing deep psychological mood. The film is also notable for its effective application of sound to the visual image.

native people and will accept well-presented fantasy of the type featured in "On Borrowed Time" and "All That Money Can Buy." Both of these films had allegorical themes. The first personified Death in the form of a mid-man-nored but instant gentleman known as "Mr. Burke"; the second represented the Devil as a rustic tongue-in-cheek rascal named "Mr. Scratch." Both characters were believable, and both films were highly entertaining because need and key had been carefully established to appeal psychologically to the audience's imagination.

Characteristic symbolism in a psychological device that is most generally wanted on American audiences, European film-makers delight in showing wind-swept fields and bushes of lightning to symbolize clashes of emotion. It has become a cliché to show waves crashing against a rocky shore in order to represent the release of human passions. Such symbolism is either too far-fetched or downright melodramatic and American audiences much prefer the more direct approach. However, symbolism has been used in a few cases with potent effect. In "The Letter," for instance, the murderous tension of the main character was symbolized by repeatedly interesting a striking shot of a fall, evil tropic moon soaring through ominous clouds.

The current cycle of films based on psychological themes has brought the subject itself very much to the fore. "Spellbound," one of the better pictures that has been made on the subject, owes its success as absorbingly adult entertainment to the fine teamwork of a set of unusually talented creative technicians. Producer David O. Selznick, scenarist Ben Hecht, director Alfred Hitchcock, and cinematographer George Barnes, A.S.C., all worked together in the same key to produce a highly artistic and thrilling motion picture. "The Seventh Veil," a British film, based on psychoanalysis also shows expert handling of this abstract subject.

We have compared the motion picture to a symphony, and in keeping with this simile the shooting script becomes a score or orchestration, as well as a working blueprint of the psychology to be used in interpreting the story—for it is in the script that the little "toucher" originates, the subtleties to which an audience reacts. Human struggle or conflict is one of the requisites of an effective script. Even a comedy screenplay involves certain set-backs and clashes between postulates and antipodes, because without this element the screen story would lack force and an audience would soon tire of a series of events unfolding too smoothly. Conflict may not necessarily be between man and man. On the contrary, several outstanding films ("The Hurricane," "San Francisco," etc.) have been based on struggle between man and the elements. Occasionally, as in the film "Gilda," a character even battles it out with his own conscience. But struggle amounting to dramatic conflict, no matter what form

it may take, is one of the essential factors in stimulating audience reaction.

Due to a mental process known as psychokinetics as projection, members of an audience tend to project themselves imaginatively into situations portrayed on the screen, even identifying themselves with specific characters. This mental process works in favor of the film-maker whose object, as we have pointed out, is to draw an emphatic response from the audience. Working on this premise, then—if, in addition to the plot action in the film, scenes are interesting showing the reactions of various characters to that action, the audience will tend to react in the same way and will be drawn more closely into the mood of the story. Therefore reaction shots are a valuable scenario device.

The technician most responsible for psychology applied or transplanted to the action picture is, of course, the director. He is the conductor of our cinematic symphony. He is the one responsible for the careful blending of all the elements that go to make up the produc-

tion. Certain directors, such as William Wyler, John Ford, Alfred Hitchcock, and Billy Wilder, are especially adept at applying psychology to film. They seem to know how and when to "hit" an audience. Hitchcock, especially, has the emotion of suspense down to a science. He knows how to build up a situation and just how long to hold his audience on tenterhooks before releasing a crushing climax. He knows how to apply little psychological tricks so that the audience-mind will not stray from the action of the film.

Directors who are most skilful in the use of psychological approach invariably stage action with a good deal of restraint, realizing that having been given the proper stimulus an audience's imagination will fill in emotional details more powerful than any that could possibly be presented on a sound stage. This psychology carries over to the players as well. Most of the truly great individual dramatic performances on the screen have been underplayed.

(Continued on Page 176)



"Spellbound" based on a psychological theme is an example of perfect technical teamwork, with every element of production psychologically aimed at the same key.

World-Wide Celebration Planned On 20th Anniversary of Sound Films

WARNER BROS. Pictures, Inc., will co-sponsor with a number of other American companies and scientific leaders, the twentieth anniversary of the practical use of talking motion pictures for theatrical use. Anniversary programs will continue over a period of four months, winding up on August 6, 1936; latter being the twentieth anniversary of the date on which Warners, by arrangement with Western Electric Company and Bell Telephone Laboratories, presented the

first commercially successful showing of talking films.

Sponsoring the worldwide anniversary celebration in cooperation with Warners are: The Bell System — including the American Telephone and Telegraph Company, Western Electric Company, and Bell Telephone Laboratories; RCA, Victor Corporation; Thomas A. Edison, Inc.; and Eastman Kodak Company. Scientific interests will also be represented by the Society of Motion Picture Engineers, many of whose members are

responsible for the development of talking picture equipment and techniques now in international use.

Special Programs Honoring Scientists

Series of special programs, designed to focus attention on the importance of scientific development and cultural contribution of the talking films, and to honor the scientists who pioneered in the field, will continue as an international scale through the summer. Special ceremonies, both in the United States and abroad, will commemorate the important pioneering experiments by science and industry, and will highlight the contribution of the sound motion picture during the past two decades in the fields of entertainment, public service, and education. Celebration of the anniversary celebration on August 6th will finish with local celebrations in key cities of the United States, Canada, England, Australia, Latin and South America, South Africa, and all other countries where American motion pictures are now being shown.

Special Exhibits Planned

Among the events now being arranged by Warners and the co-sponsoring companies are: special exhibits of early communications and photographic equipment; national and international science and industry conferences on future development; educational forums on the applications of sound motion pictures in teaching arts and sciences, and on the use of sound film to promote international understanding. Special programs will be devised for theatres throughout the country.

Initial Vitaphone Showing

The talking motion picture as it is known today dates from the August 6, 1906, special Vitaphone program premiered at the old Warner Theatre in New York, in which recorded music and speech were synchronized with motion pictures. Prior to this showing, Warners—like other film producers—had been engaged in the production of silent pictures. It was a demonstration in 1905 of a talking picture device perfected by the Western Electric Company and Bell Telephone Laboratories which decided Warners to venture their entire financial resources in the development of the new medium, until then generally regarded with great skepticism by the film industry as a whole.

Edison's Pioneering

Although talking pictures were first presented successfully in 1906 to create a revolution in production techniques, the scientific development of talking motion picture film traces its ancestry to the



Early model of sound mixing booth—unmanned and fixed with sound-deadening materials. Similar and smaller booths widely housing cameras and camera staff in early days of sound production proved to be most basic when doors were closed during shooting.

inventions of the late Thomas A. Edison; and the invention of the motion picture by Dr. Lee de Forest. In 1887 Edison wrote: "The idea occurred to me that it was possible to devise an instrument which should do for the eye what the phonograph did for the ear, and that—by a combination of the two—all motion and sound could be recorded and reproduced simultaneously."

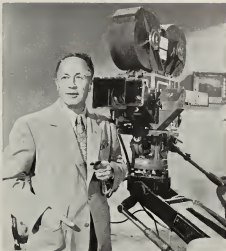
Two years later, Edison gave the first demonstration of a small motion picture, mechanically synchronized with a phonograph record. During the next dozen years, Edison had made nearly 50 brief motion picture subjects for the "Kinetophone," as the Edison device was known, and these were shown in a number of theatres in various parts of the country.

De Forest's Important Contributions

De Forest developed a sound-on-film method of synchronizing sound with motion pictures, which he called "Phonofilm." Demonstrations of Phonofilm were given in de Forest's New York laboratory in 1923; which was followed by public exhibitions in the following two years in motion theatres, including the Rivoli and Radio Theatres in New York City. At the time, however, leaders of the film industry refused to get excited about talking pictures as a replacement for the then-popular silent product.

Warner Adopt Western Electric Method

Continuation of these pioneering activities resulted in perfection of the first talking picture technique available up to that time by Western Electric Company and Bell Telephone Laboratories—after a long period of intensive and expensive research. Although the silent films were at the height of development both technically and artistically, audience interest was noted to be



Powell Martin, A.S.C. and one of the latest types of sound-proofed cameras being used at Warners

inspiring off in the theatres, and the Warner brothers were progressive enough to take the long shot that talking pictures would be the solution to reversing the waning box office. Experimenting with the new medium, Warners soon developed the new technique and adapted it for practical production to the point that they were able to produce talking pictures successfully through use of the device perfected by Western Electric and Bell Laboratories.

Initial Showing in 1926

On August 6, 1926, at the then-known Warner Theatre, New York, the entire future of Warners was wrapped up in the first public showing of a complete program of talking and sound films were shown. Metropolitan Opera stars and outstanding concert artists sang and played before the audience, followed by the feature, "Don Juan," starring the late John Barrymore, with a fully synchronized and recorded musical score.

The Vitaphone premiere — although enthusiastically received by the New York public at the time — failed to jolt the complacency of other company executives, who considered the showing a passing fancy which could not disturb the even tenor of the film industry at that time. But Warners predicted their entire business future on talkers, and

were soon turning out features that generated terrific grosses in the relatively few theatres that had farought enough to install the sound reproducing apparatus.

Bell Telephone Laboratories and Western Electric — continuing their development work — did important research in sound-on-film recording; while Radio Corporation of America likewise earned forward development of sound-on-film. Six months after the Warner premiere, William Fox and Theodore Case introduced the Mariettea powered.

In the early Vitaphone period, Victor Talking Machine and Columbia Phonograph both made important contributions to the techniques of recording-sound; while Eastman Kodak and its East film division developed the means of adapting motion picture film to the requirements of sound-on-film recording.

Spokes of the 36th anniversary of the introduction of commercially successful sound in motion pictures emphasize that—in addition to commemorating the achievements of the past—the event will be dedicated to the setting of new standards of accomplishment in motion picture sound recording for the future, in addition to opening of new horizons of public service by film and the motion picture industry.



An early type of film in double camera mechanism used during shooting.

Survey of Current Processes of Color Kinematography in England

By JACK H. COOTE, F.R.P.S.

(The following address by Mr. Coote, Director of British Triunex Process, Ltd. of London, delivered to the British Kinematograph Society on February 15, 1946 is particularly informative in detailing the present status of color motion picture cinematography in England. The address was originally printed in the March 16, 1946 issue of the British Journal of Photography, and reprints by permission.)

Recalling a review of color cinematography by Dr. D. A. Spencer a decade ago, Mr. Coote stated: "Although the situation has not radically changed since then, rather more is now known about several processes which Dr. Spencer could only touch upon, because of their short history at that time. In addition, the intervening years largely eaten up by war, have resulted in a certain amount of confusion and uncertainty regarding

the true position and probable future of a number of current colour processes. Therefore, a discussion of the advantages and the disadvantages of most of the currently operated processes might be useful at this time, although any paper dealing with colour kinematography must necessarily leave many questions unanswered—time alone is capable of sifting colour processes into their true value and relationship.



Setting the camera up—Olivia Dufayolle and Ray Milland start up on a walking shot for Fox-movie's "The Well-Deserved Wife." On the camera dolly, which moves up the hill on the wooden tracks specially laid down, are Director Sidney Lanfield and Director of Photography John Fells, A.S.C. Dolly on sidewalks behind pole carries the sound microphone boom.

"The whole field of colour kinematography can be divided into two parts if we deal separately with additive and subtractive processes, and since the only additive process which is at present available for commercial use is Dufay-color, it will be convenient to discuss that process first of all. Any process which permits the use of an ordinary single film camera for colour photography, as does Dufaycolor, has an unquestionable advantage over one which requires the employment of a special colour camera, and the advantage is further increased if the same material can be satisfactorily exposed with a considerably lower level of illumination than that which is possible for subtractive processes. Yet these advantages can be outweighed by other considerations, and this is evidenced by the fact that some 90 percent of the colour which reaches the commercial screen is the result of photography with a 'beam-splitter' camera.

"Probably the difficulty which has weighed most heavily against the widespread use of the Dufaycolor process is the fact that a theatre with a screen illumination of 10 foot lamberts, which is the recommended Society of Motion Picture Engineers standard, will have an effective illumination of less than two foot lamberts when running Dufaycolor. The effect which the discrete filter elements of the Dufaycolor process have upon picture definition has been the subject of much discussion, but it is certain that the number of lines or elements per millimeter—which is at present 25—is less than the 40 or 50 lines per mm. which it is now usual to resolve in black and white prints made from negative materials such as *Fine X*.

"It might be thought that the high base density of 0.75, due as it is to individual filter elements, would seriously limit the quality of sound obtainable from any track printed on such material. However, Klen has claimed that in practice the output of the photo-electric cell is 70 percent of its normal and suggests that this somewhat surprising result is due to some form of 'transmission' effect resulting from the constantly changing wavelengths to which the cell is exposed during the passage of the triocular filter elements past the slit. The effect is probably more readily explained by the fact that, despite their visual density of 0.75, all three of the colour filter elements will be highly transparent to infrared rays, to which the usual type of photo-cell is most sensitive.

Technicolor—Advantages and Disadvantages

"The Technicolor process has been brought to such an advance state of tech-
(Continued on Page 184)

At Your Service!

the staff of

J. E. BRULATOUR, INC.

with

EASTMAN
FILMS—

J. E. BRULATOUR, Inc.

FORT LEE



CHICAGO



HOLLYWOOD

THROUGH the EDITOR'S FINDER

FOR THE past 20 or more years, there has been a magic gleam connected with Hollywood and all phases of motion picture production and related subjects. The Better Business Bureau has certainly estimated the public taste of Hollywood against unscrupulous promoters of screenwriting and "know-to-write-film-scripts" schools which have earned the added bid of a Hollywood address to lure tuition fees from all parts of the world for correspondence courses which are claimed to instruct individuals sufficiently in motion picture production techniques for eventual lucrative success in the motion picture industry.

Because of the prominent part played by motion pictures in the war effort for all of the United Nations, in addition to the growing interest in every country for its own national film industry—even though such plans may eventually be devoted to documentary and instructional pictures produced by either the government or private enterprise—there may develop correspondence schools of instruction in cinematography and other related professional and technical branches of film production. And it is entirely likely that such correspondence schools—because of the glamorous touch of a Hollywood address—may be established in the film capital in order to more easily catch the attention of possible fee-paying students.

From a most intimate knowledge of the artistic and technical sides of film production, it might be pointed out that work in the studios and on film production—regardless of the department—is decidedly minor and exacting. There is little fame connected with production posts, and a lucrative income is dubious in contrast to the amount of time, energy, brain-power and labor necessary.

And—as any person who has dabbled in amateur photography or cinematography is well aware—a certain amount of information may be obtained from books and other printed words, but, in the last analysis, perfection in the art of photography finally comes from practical experience. There is no substitute for the latter, regardless of any claims to short-cuts that might be advanced.

So, at this time, it is well that we point out the possibilities of such promotion by various schools claiming to instruct in the basic fundamentals and finer points of cinematography or other technical phases of motion picture production, and that such courses should be thoroughly investigated by those interested to make certain that the honest instruction to be given will be complete in basic fundamentals, and—more important—that the instructors are fully qualified by experience in actual film production in major Hollywood studios to impart the proper information to the subscribers to such a course.

ALTHOUGH certain secrecy surrounded the project—mainly to prevent either too great anticipation of early installation or rabid opposition—it is pertinent at this time to give a brief explanation of the experiments being conducted by 20th Century-Fox in the 50 mm. width film size for possible standardization in the near de luxe theatres. Let it be stated definitely that—before such a new film size be adopted—much time and effort is necessary for research and testing out of new techniques required; and it will be several years before the initial feature film would be made for release in the theatres.

The experimental enterprises being conducted by 20th-Fox is designed to accentuate the photographic and sound qualities of pictures of the future for the new theatres planned for construction during the next several years by the major circuits. Main purpose seems to be to allow for a wider sound track on the positive prints in order to accommodate the stereophonic-type of three track sound as developed originally by Western Electric; which allows each sound track to be channelled to corresponding left, center, and right horn responders behind the theatre screen for realistic three dimensional sound effect. In retaining present frame heights of 15 mm. size, the 50 mm. width will allow for a wider camera and projector aperture of approximately 50 per cent.

Such a wider scope for the camera will naturally entail plenty of experimentation on new and radical photographic techniques. But the expert studio cinematographers—as in the past—will amply solve the problem in their specific field.

UNION PACIFIC, which was one of the first railroads to utilize 16 mm. kodachrome for display of the scenic wonders of the territory it covers, currently announces a photographic contest which is certain to attract numerous camera enthusiasts to the designated locations of Zion, Bryce, and north rim Grand Canyon National Parks in Utah and Arizona. It's a splendid idea of the picture-conscious UP officials, and certain to be duplicated by other railroads, travel agencies and vacation spots.

In addition to substantial cash prizes for \$500, and 10000, entries in either black-and-white or color; there are divisions especially for black-and-white photos and color transparencies or prints. Pictures to be submitted are to be taken in the designated National Parks between June 1 and October 1.

For the benefit of program chairman of amateur camera clubs, it might be pointed out that Union Pacific produced a beautiful travel film in 16mm. kodachrome of the area open for the contest

under title of "Nature's Art Gallery," which might be booked for club meetings to provide members with an idea of the wide scope for movie making.

STATE of West Virginia is making a bid to attract amateur movie and photographic enthusiasts for vacation trips, and has set up a special photo information service for the benefit of film-making tourists. The service has been inaugurated by the State Industrial and Publicity Commission at the state capital, Charleston, and will supply inquiries with information on districts holding natural photographic prospects, weather and seasons, sources of photographic supplies and finishing plants in the state, and travel information in general.

The plan as set up by West Virginia is just another indication of the progressiveness of states and other organizations in recognizing the promotional value of attracting camera enthusiasts for movie making.

RECENTLY announced order of ROPA will result in retail price till for new cameras, projectors, and most photographic accessories of eight or ten per cent over pre-war levels; in addition to the excise tax of about 18 per cent. Price increases were allowed to partially offset greater labor and material costs of the manufacturers. However, increase granted does not apply to film or used photographic materials.

There is no question but what the terrific interest generated during the war in all photographic activities will greatly expand the number of amateur movie enthusiasts from now on. In attracting new members and retaining the interest of beginners in club activities, it was suggested that clubs might set up a special 15 minute or half hour period either prior to or following the regular meeting, in which talks on fundamentals of photography and various types of equipment are given for the benefit of the new enthusiasts. It is certain that this procedure will be highly informative to the beginners, and speed their knowledge of fundamentals.

A number of the older amateur cine clubs continued the fundamental lectures or supplemental meetings on elemental and advanced cinematography during the war years for most beneficial results in retaining interest of the newer members. From reports keeping over the editorial desk, other clubs have either launched or resumed such activities for the novice members during the past few months. In several instances, the instructional meetings are held in between the regular monthly get-togethers; while in other cases, the informative sessions are staged either before or following the regular meetings.

Now Available for Immediate Delivery!

A Limited Number of

WALL 35MM SOUND CAMERAS

COMPLETE WITH AMPLIFIERS AND POWER SUPPLIES —
READY TO RECORD SOUND

PRICES

1 Wall Camera — Single System Sound

CAMERA—Complete **\$5,450.00**

- 1 Camera Case—Carrying
- 1 Camera Accessory Carrying Case—carrying all 1 extra lens
- 1 Magazine belt—tightener
- 2 Collapsible film spools
- 2 Reel-to-reel cameras
- 1 100' and 1 400' magazine loading tools
- 1 Filter holder—containing with 9 double and 3 single clear holders
- 1 Oil can
- 1 Pin plates
- 1 Soundifier
- 1 Bottle of camera lubricating oil—good for 90 below zero
- 2 Camera belts—small, medium, large
- 1 Camera portable power pack—shoulder carrying strap with 4 non-spillable storage batteries and 1 4-watt, 2 lamp, 1 11-watt outlet

SET OF LENSES—Complete **\$1,420.00**

- 1 Bausch & Lomb Bacter 50 mm f 2.2 coated lens
- 1 Bausch & Lomb Bacter 75 mm f 2.2 coated lens
- 1 Bausch & Lomb Bacter 100 mm f 2.2 coated lens
- 1 Bausch & Lomb Bacter 150 mm f 2.2 coated lens
- 1 Bausch & Lomb Bacter 200 mm f 2.2 coated lens

SOUND SYSTEM—Complete **\$1,851.00**

- 1 Magneto Galvanometer
- 1 Amplifier
- 1 Amplifier Carrying Case
- 1 Amplifier Accessory Carrying Case
- 1 Camera power cables
- 50' microphone extension cables
- 1 Galvanometer Cables
- 1 Amplifier Power Cables
- 1 Set of Batteries
- 4 Battery Cables
- 2 Microphones with cables, gooseneck and baffle
- 2 Microphone Tripods
- 1 Microphone Pack with 4 non-spillable storage batteries

TRIPOD—Complete **\$400.00**

- 1 Tripod (cast) handle
- 1 Clamp handle
- 1 Baby tripod with carrying case and 11-lb. ball
- 1 Tripod with head and ball and 11-lb. ball
- 1 Tripod

1—Magazine carrying case with 2 100' magazines **\$285.00**

1—Magazine carrying case with 4 400' magazines **\$384.00**

TOTAL PRICE **\$9,990.00**



Compact — light in weight — easy to handle — incredibly precise — the WALL 35MM Sound Camera meets the most exacting requirements of the professional photographer. Comes complete with tripod. ACT PROMPTLY to get one of these outstanding Sound Cameras. The number now available is limited and will go quickly.

WIRE — PHONE — OR WRITE AIR MAIL TO

ST. GEORGE RECORDING EQUIPMENT CORP.

76 Varick St.

New York 13, N. Y.

Film Industry to Salute American Society of Cinematographers on 25th Anniversary Celebration at Cocoanut Grove, June 17

The Hollywood motion picture industry, including foremost stars, directors, studio heads, producers, executives and other artists, will celebrate the twenty-fifth anniversary celebration of the founding of the American Society of Cinematographers at a dinner dance to be held in the Cocoanut Grove of the Ambassador hotel, Los Angeles, on evening of June 17th, 1946.

The affair will be the first post-war event of its kind to be presented by the Hollywood production branch of the industry; and as an exclusive all-industry affair—will be attended by the top stars and personalities of the business.

Edgar Bergen, A.S.C., as chairman of the entertainment committee, is currently assembling a program comprising stellar screen and radio stars for appearances at the event—and the lineup is expected to surpass the best ever presented by Hollywood filmites.

Schultheis Joins Telefilm

Herman Schultheis, previously with Walt Disney Productions and 20th Century-Fox, has joined Telefilm. He will devote his time to research and design of new precision equipment for improvement of sound and printing processes of 16mm. films.

Dunn Returns to Ansco

Robert M. Dunn has returned to his post of advertising manager of Ansco, following two years' service in the Navy. He will headquarter at company's New York office, while Winthrop Daveport will continue in charge of the Highgate department under Dunn's direction.

Details of Bell & Howell Deal with Rank Interests Told

General details of the long-term agreement between Bell & Howell Co., makers of precision photographic equipment, and British Acoustic Films Ltd., of England (engineering and manufacturing facility of the J. Arthur Rank group), are disclosed in an announcement by J. H. McNabb, president of B&H.

Under stipulations of the arrangement, a complete interchange of research as well as manufacturing and distribution of equipment is effected between the two firms. All standard 35mm. and substandard 16mm. and 8mm. Bell & Howell equipment, including sound and silent projectors, cameras, and slide projectors (as well as a wide range of accessories) will be made in England by British Acoustic Films Ltd., whose plants will be operated in strict accord with Bell & Howell engineering and production methods. Technical "know-how" for this project will be afforded by E. C. Johnson, veteran Bell & Howell engineer, who will be located in England for the next several years, it is revealed. Distribution of the English-made products will cover the British Empire and certain other countries.

Deal to Affect Films Also

Under separate but concurrent agreements, all substandard motion picture films owned or controlled by British Acoustic Films Ltd., will be distributed in the United States, its possessions, and throughout South America by Bell & Howell, thus augmenting considerably the Chicago concern's already enormous film owned or controlled by British Acoustic will distribute, in their territory, films owned or controlled by Bell & Howell's Filmstock Library.

Aussie and British Racetracks Negotiating for Telefilm

Australian racetracks in Melbourne and Sydney, in addition to representatives of courses in England, are currently negotiating to install the Telefilm system of photographing each individual race of thoroughbreds. This expansion of the Telefilming of races which has proved so successful at the Hollywood Park and Santa Anita tracks in Southern California, is disclosed by Joseph A. Thomas, president of Telefilm.

Pictorial Films' Releases

Total of 39 features, mainly from PRC and previously released in 16mm. run to theatres, comprise the 1946 releasing program of 16mm. pictures by Pictorial Films, Inc. Sol Lesser's feature, "There's A Family," is also on the releasing schedule.

Subscribe NOW to

AMERICAN CINEMATOGRAPHER

— RATES —

United States, Central and South America	\$2.50
Canada and Newfoundland	\$2.75
Foreign	\$3.50

USE THIS HANDY ORDER BLANK—

AMERICAN CINEMATOGRAPHER

1782 North Orange Drive
Hollywood 28 California

Please enter year's subscription to

AMERICAN CINEMATOGRAPHER

Name

Address

City and State



If you take it on Hypan you'll have it for good!

HERE'S a way you can be sure of getting clear, real-as-life screen images—to be sure of sparkling color whether you shoot along the banks of a shadowed brook or in the brightness of a sun-drenched beach.

For you can take the scenes you want *when you want* with Anso HYPAN Reversible Film. It has plenty of speed for all normal outdoor scenes—even on dull days or when your subject is in the shade.

You can get that professional touch in your home movies, because Hypan's gradation assures crisp, bright, fine grain pictures on the screen—where your audience sees and enjoys them.

Ask for Anso Hypan, today! **Anso, Binghamton, New York.** A Division of General Anso & Film Corporation. General Sales Office, 11 West 42nd Street, New York 36, New York.

ASK FOR

Anso

8 and 16 MM

HYPAN FILM

SOVIET'S WAR DOCUMENTARY

The Great Turning Point

(Editor's Note: This article, reprinted from Moscow, is an official release of the Soviet film industry. The author, Arkady Gikhalov, is one of the best of the Soviet cameramen—working with outstanding directors of that country for years. He has handled photography on several pictures with director Friedrich Zmuk, and it was with the latter that he recently finished the full length film which is the subject of this article.)

It would be difficult to find anyone today who is not familiar with the word Stalingrad. In the minds of all friends of the United Nations, the name of this Russian city is associated with the great turning point in the late war, marking the beginning of the end for Nazism.

Prolonged defense of the ruined city, where every house and street witnessed the incredible staunchness and courage of the Red army and its men, seemed nothing less than miraculous to many—but, as everyone knows—this is not the age of miracles. Victory at Stalingrad was definitely the result of precise and timely execution of a brilliant plan of the Soviet High Command, and it was this plan which served as the theme of this new Soviet film, "The Great Turning Point."

Needless to say, such a film required the services of a first class scenario writer; and this assignment was filled by the promising young playwright, Boris Chirkov. The scenario, on the other hand, called for a brilliant and highly-skilled producer—and Friedrich Ermler handled the responsibilities admirably.

An earnest and observant artist, he deals only with vital phases of the day. His heroes are thinking human beings whose exploits and certainly in justice of their cause gain them victory over the enemy. This was best exemplified by his films "First Come," "Peasants," "Great Cities," and "She Defends Her

Country." It is also true of his new film, "The Great Turning Point."

Main role of the army general is played by Mikhail Denzhov. Necessary portrayal of brilliance of strategy, self-power of leadership, loyalty of true friendship, and sense of justice—all were admirably portrayed by the artist in the most responsible role.

Many organizations of the armed forces gave intimate attention to the production of the new film, and did their best to help us. Many times, the director and his assistants consulted with the military specialists and frequently conferred with generals who have fought in the great patriotic war.

Actors were put through rigorous training. Ermler was satisfied only when they had gained the smart bearing of the professional soldier. He dressed them in uniform and made them walk through the streets of Leningrad—personally following in their wake. He watched every gesture of his "generals", and on one occasion, Ermler asked the director of the studio to receive a group of army men consulting on the proposed film. A lively discussion on the film ensued, and it was only when they were taking leave that the studio official realized that his "guests" were none other than the actors assigned to the picture. Ermler then explained that he had made this experiment merely as a test of the naturalness of his players, and that he was highly satis-

fied with the results. Now that the film is finished, we are pleased to hear from army officials that it is militarily correct in all details.

It was particularly difficult, of course, to re-create the atmosphere of war operations, but in this we received invaluable aid from the Red Army command.

We did our filming in the wake of advancing troops on what was only recently hostile terrain. None of the customary filming tricks were necessary here; as the background locations were realistic scenes of very recent combat operations. We were assigned a large army detachment headed by eighty nine officers.

Preparations for filming at exact location of Stalingrad's massed houses 48 required several days. This is a circular scene in which spectators command a view of combat operations in three streets. Movement of the camera had to be calculated down to the split second. For example, the camera had to be moved towards a certain point just when tanks were appearing and when the walls of neighboring houses were collapsing in flames and smoke. Slightest delay in proper timing would have spoiled a shot which could not have been repeated. All details had been so thoroughly practiced and perfected by the camera crew that the performance was filmed most successfully.

Success of "The Great Turning Point" coincided with another happy event in the life of Ermler when the Soviet government awarded him the Stalin prize for his film, "She Defends Her Country," produced in the first year of the war. This was the second time that Ermler received the Stalin prize; first of his films to receive the award being "The Great Cities," story of the Soviet statesman, Stalin.



New Soviet developing machine built to Army Air Corps specifications for the processing of Krasa color film. This small unit has a capacity of approximately 12 feet per minute. It is portable in sections, each of the latter weighing approximately 300 pounds, and has all the advantages of the larger Krasa machine.

Whatever the action

follow shot
pullback shot
tracking shot
zoom shot

You add new punch and smoothness

PROFESSIONAL JUNIOR TRIPOD

With Removable Head



friction-type removable head



standard spread legs base



new all metal "Baby" Head



the "Hi-Hat"



extendable 16mm camera (optional) 16mm
tripod, rapidly — precisely, slip-right

360° pan and 80° tilt smooth-as-silk action with 5 year unconditionally guaranteed friction-type head. **Removable**—mounts easily on Camera Equipment's "Hi-Hat" low-base adapter or Baby "Professional Junior" Tripod base. Top plate takes 16mm E. K. Cine Special, with or without motor, 15mm DeVry, B & H Eyema, or any other 16mm camera! Quick positive height adjustments with sturdy spread-leg design. Complete tripod weighs 14 lbs. Low height at normal spread, 42". Extended height: 72".

Instant delivery right from stock. Write or wire to-day!

Call: CIRCLE

Cable: 6 5080

CAMERA EQUIPMENT CO.

TABLET COVER

1000 BROADWAY NEW YORK CITY

AMONG THE MOVIE CLUBS

Syracuse Movie Makers

Three films from the library of AMERICAN CINEMATOGRAPHER highlighted the film program of the March 19th meeting of Syracuse Movie Makers. Pictures shown included: "Mood of Nature," by Paul Narford; P. R. P. 2; "In the Beginning," by Fred Ellis; and "The Ship of Spiders," by Sherlock. "Calderina," by member Karl Cook, completed the program.

Recording demonstration of sound-on-film featured the meeting on April 2nd, and a trial film was synchronized spectroscopically to disc, with the narration and music recorded and then played back at the meeting. U. P. Harrell, formerly with the AAP and a photographer on the Phoenix of field roads, screened some of the films he took in the India and European battle areas at meeting held on April 16th. Showing was the first before a semi-public audience.

Utah Cine Arts Club

Lecture on the fundamentals of movie making — covering exposure, focus, and composition by Al Morton, featured the March 20th meeting of Utah Cine Arts Club, held at Yammers Hall, Salt Lake City. In addition, Morton used his new 35 mm sound projector to screen, "Man, Gun and a Dog" for the film end of the program, which also included "Alaska Time Future" by Mr. and Mrs. J. W. Magrath; and "Kansas Easter," loaned by ACL.

Past president George Reigned functioned as program chairman for the April 17th meeting, when a technical lecture on movie making angles was delivered by vice president Pete Larson. Film program for the evening, in addition to the regular surprise picture, comprised: "Up a Winding Road," by Larson; "Thrills and Spills," by O. L. Tapp; "Summer, 1945, at Lost River," by J. F. McClement; "Atwood" by Kenneth Fullmer; and "Vacation Land," by Vern Lent.

Cinema Club of San Francisco

Cinema Club of San Francisco is planning a gala celebration for its 15th anniversary at meeting of May 1st, which will be preceded by a dinner pot-luck. Film program of the April 15th meeting, held at the Women's City club, included: "Goodbye, Mexico & Havana," (8mm) by M. L. Dreyfus; "Lake Tahoe," (16mm) by B. Bravich; "Little D'Oroville," (16 mm, from ACL library); "Ditch Bitchy," (16mm) by Leon Gagne; George Kearney of Ames provided a discussion and demonstration reel of the new Ames color film. Many members took their cameras and tripod on a special club visit to a nursery in Hayward, where a large collection of oriental plants in full bloom were generously shown from all conceivable angles.

Brooklyn Amateur Cine Club

Several "Gala Night" of Brooklyn Amateur Cine Club spotlighted a new idea for programs of this nature — a Newseries which included selected new items filmed during the year by club members. Contributions to the first edition of the club's color reel included: Charles Ross, Charles Benjamin, Francis Sinclair, William Morris, and Irving Gittel. Other films shown included: "Farmer's Daughter," by Clarence N. Aldrich of Long Beach, Calif.; "Honey Harvest," by W. W. Vincent, Jr. of Kansas, Wis.; "Aving and Afeld," by Frank E. Gurnell; "Song of the Open Road," by Charles Benjamin; "Tessie," by Charles Ross; and "Windjammer," by Sidney Morris.

Charles Debevoise presented his film, "Queenie is Ready" at the April 17th meeting; while Walter Bergmann is slated to be featured on program of May 15th for exhibition of a group of his outstanding films.

Los Angeles Cinema Club

Club secretary Jack Shandler reported a new high in membership of the Los Angeles Cinema Club at the April 1st meeting held at the Ethel Club's Fine Arts Hall, with roster showing 165 active members. With diversity the keynote of arranging each meeting program, films shown provided a fine balance of entertainment interest with: "While the Earth Remains," by Frank E. Gurnell; "High Sierra Vacation," by I. S. Peterson; "Navajo Land," courtesy of Santa Fe railroad; and "In All the World," courtesy of Great Northern railroad.

Alhambra La Casa

C. L. Ritter chairmanned the April 15 meeting of the La Casa Movie Club of Alhambra, California, at which film program comprised: "Tourist's Viewpoint in Mexico," by Hugh S. Wallace; "Four Seasons in the High Sierra," by Lloyd Austin; and "While the Earth Remains," by Frank E. Gurnell. ACL, about 50 members of La Casa journeyed to the Hansen area on the March 10th weekend to take pictures in the colorful Odessa and Male canyons and the old mining town of Calico.

Los Angeles Eight

Arden Farnas Calabrese was site of the April 8th meeting of Los Angeles Eight Club, with a lucky ticket holder being presented with a roll of kodachrome film. Program included a brief talk on the simple features of filming, after which the club's technical committee took the floor to answer questions on photographic problems of members. Special contest for members during May will provide for prizes to be awarded for 50 feet subjects, suitably edited, in either color or monochrome.

Philadelphia Cinema Club

Members of Philadelphia Cinema Club were provided with a new and decidedly interesting feature of the much-photographed "Colonial Williamsburg" at April 12th meeting held in Westminster Hall, when Harold Hoffman displayed his 16mm film, "The Restoration of Colonial Williamsburg." Latter treats the subject in a manner never seen before, and few of the scenes were recognizable as similar to those in previous pictures. Other films on the meeting program included: "The Village Cat-up," produced by the E-46 Movie Club; and "Safari on Wheels," through courtesy of Kono. Meeting was the first under guidance of Francis M. Hirst, the new president.

New York Eight

Eight annual meeting of New York Eight Club was held at the Hotel Pennsylvania on April 24, with the program committee lining up "the greatest 8mm. show on earth" for the large turnout of members and guests. Subjects included: "The Bride's Rascals," by George Valentine; "Garden Truck," by A. D. Furman; "Southern Exposures," by Ernest Krenner; "Lassie Steps Home," by R. J. Berger; "That's Kill You," by Lee Wadman; and "Return From Paris," by Dr. Leonard Weaver. April 15th meeting of the New York Eight programmed the following films: "The Story of America's Airborne," by Victor Asanov; "The Post Master," by George Valentine; and "Major Investment," by R. E. Richards.

Westwood Movie Club

Westwood of San Francisco continued its interesting get-togethers with film program on March 20 at St. Francis Community Hall which included following films: "Waterfront Parade," (8mm.) by Eric Damack; "Westwood's Fourth Annual Dinner," (8mm.); and a sound-on-disc demonstration (courtesy of General Electric) by Fred Harvey and Don Campbell. Elsa Luck, chairman of the membership committee, has signed up 12 new members since recently taking office — another indication of the wider interest in movie making since film and equipment has become available.

Metropolitan Club

Harry Goodell's "Trevor" featured the April 18th meeting of Metropolitan Motion Picture Club, held at Hotel Pennsylvania. Other films included: "How Green Is the Earth," by Charles Benjamin; "Sil Legs," by Charles and Robert Cole; and "Windjammer," by Sidney Morris. At the May 1st Supplemental meeting, Morris will detail the planning of his vacation for the sole purpose of bringing back a movie of outstanding caliber and importance cinematographically.

KODAK MOVIE ACCESSORIES ARE BACK!

HERE are just a few Kodak accessories—now returning in growing quantities for better, more varied movie making. Many items are available right now. Soon, Kodak's full-range equipment and accessory line-up will return to fill your every movie requirement. Keep in touch with your Cine-Kodak dealer.

Filters . . . Pola-Screens

FILTERS—with Kodachrome, for more varied use of color filters; with black-and-white, to heighten sky and cloud contrast, to reduce haze. **Pola-Screens** to deepen blue skies with Kodachrome, to control unwanted reflections. **Portra Lenses** for extreme close-ups. **Lens Hoods** as sunshades for lenses and attachments.

Filters of various kinds for Cine-Kodaks are available in two styles—in "W" or "Z" mounts, that fit directly over the standard lens . . . and unmounted, as part of the Kodak Combination Lens Attachments adaptable to both standard and accessory lenses. The Combination Attachments also take, separately or jointly, Pola-Screens, Portra Lenses, and Lens Hoods.

FOR SPECIAL SCREEN
EFFECTS IN FULL-
COLOR OR BLACK-
AND-WHITE



FILTER MOUNTS FOR CINE-KODAK STANDARD LENSES

Camera	Lens	Mount or Lens
Cine Kodak Eight 28	19.5	2
Cine Kodak Eight 23	19.5	2
Cine Kodak Super 80	19.5	2
Cine Kodak Magazine 8	19.5	Adapter V only Adapter V 1/2
Cine Kodak 8	19.5	2
Cine Kodak E. A. 19	19.5	2
Cine Kodak V. 19	19.5	2
Cine Kodak Magazine 16	19.5	2
Cine Kodak Special	19.5	2

Upper Right—Pola-Screen and Lens Hood in combination on the "Magazine 8." Right—Adapter Ring, Supplementary Close-up Lens, Extension Bar, Fluor. Gel., and Lens Hood—they equal a built-in unit assembly for better results.



Supplementary Lenses

FOR CLOSE-UP
FILMING WITH A
25mm. (1-INCH) LENS

HERE'S a simple way to real close-ups with Cine-Kodaks having built-in or auxiliary focusing devices . . . for coverage as small as $2\frac{1}{2} \times 3\frac{1}{2}$ inches on a 16mm. camera—even smaller when the 25mm. lens is seated on the "Magazine 8." It's easy to convert from "average" shooting to close-in movie making with Supplementary Lenses in W-mounts—simply slip them directly into the standard 25mm. f/1.9 lens in place of the regular Lens Hood . . . and you're ready to make movies in a matter of seconds.



EASTMAN KODAK COMPANY ROCHESTER 4, N. Y.

Kodak

Buying A New Sound-Film Projector? ... Select It Carefully!

With the already indicated widespread interest of newcomers into the field of amateur cinematography, it is natural that many will want to acquire both camera and projector for their own personal use and enjoyment.

The attractiveness of the expanding market for the sale of cinematographic equipment to the amateur is already projecting new camera and projector manufacturers into the field. From several sources come reports that sound-film projectors will be manufactured to retail at prices far below the standard and proven brands of such specific equipment in the pre-war period.

Which necessitates a word of caution to the prospective purchaser who might not have the advantage of expert advice on equipment desired from friends or associates. Members of amateur movie clubs, unless newcomers, are quite familiar with the performance and durability of the standard brand equipment—or can readily secure the proper information and comparisons from fellow club members.

NEW EASTMAN KODAK V.P.



E. F. "Ted" Curtis, national official of Eastman Kodak Co., who has been elected to post of vice-president of that company.

It must be borne in mind that camera and projectors; professional 35 mm., 16 mm. and 8 mm.; require precision tooling in manufacture, and cannot be constructed on too great an assembly line basis. This requirement of machining various parts to very close tolerances, eliminates the wearability and performance satisfaction to the individual purchaser.

In the case of sound-film projectors, there is the added factor of the inclusion of a sound system which also necessitates parts that are precisioned. The time has passed when a 16 mm. sound-film projector will be accepted by an amateur enthusiast just as long as it will project a picture and reproduce any kind of sound—as was the case in the early 16 mm. machines.

From various reports in circulation, the standard and established manufacturers of 16 mm. cameras and equipment are planning to make available a number of models in each line. But the past experience and reputation of these manufacturers will not allow for the marketing of cheap and shoddy models which cannot deliver satisfaction in projecting a suitable picture or reproducing sound of suitable quality.

These models of machines to come forth will be in various price ranges depending on requirements of the purchaser. They will undoubtedly range (for lowest price) from the small projector to be used in living rooms at home for enjoyment by the family—where a small picture and not too great sound volume will suffice to the large professional models designed for constant use in fairly large rooms or auditoriums where a large picture on the screen, long throw, and wide range of sound volume is necessary.

It is advised that movie enthusiasts intent on early purchase of a sound-film projector, carefully check over the models in line with individual requirements. Hasty selection because of cheapness in initial cost, may be regretted later. Remember, you get what you pay for.

MGM Starts 16mm. Feature Distribution Abroad

New policy of Metro-Goldwyn-Mayer to supply 16mm. prints of its feature and short releases for foreign distribution is being installed in 16 countries, company announcement discloses. Prints in 16mm. size are already being shipped, with likelihood that Latin American countries will start first series of movie exhibitions immediately. The countries getting initial 16mm. prints of MGM productions are: France, Belgium, Argentina, Puerto Rico, Cuba, Mexico, Chile, Panama, Venezuela, and the Philippines.

Victorian Amateur Cine

Annual open "Five Best" competition of Victorian Amateur Cine Society of South Melbourne, Australia, resulted in the following winners: "Mass Understanding," (16mm. B&W) by V. E. Pye, South Melbourne, Victoria; "Sauce for the Goose," (16mm. B&W) by W. Flalock, Melbourne, Victoria; "Blissome Time," (8mm. Kodachrome) by L. K. Anderson, Forestville, South Australia; "Yours Yare's," (16mm. Kodachrome) by W. W. Norman, Caulfield, Victoria; and "Mountain Holiday," (16mm. Kodachrome) by V. E. Pye. First named film also won the president's trophy for the best entry by a Victorian Club member.

Victorian Cine Society has membership of about 100, and maintains its own clubrooms. Latter are equipped with a Bell & Howell 16mm. projector, tip-up seats, and various equipment for use of members including dual turntables, recorders, microphones and amplifiers. An 8mm. projector will be purchased as soon as available.

Syracuse Movie Makers

Syracuse Movie Makers is now installed in quarters at 211 Glenwood Ave., Syracuse, N. Y., and such time as the organization can either purchase or lease its own clubhouse which would have sufficient space to house the processing equipment owned by the club. Latter includes facilities for processing of both negative-positive and reversed stock of either 8mm. or 16mm. film. Also available for members' use were two 16mm. step printers, one 16mm. continuous and sound track printer, and one 8mm. step printer—all designed and constructed by members.

As first step in expanding post-war activities, Syracuse announces a film contest among members to be judged late in the year. Film winning sufficient points from the judges will be awarded "Oscarettes" of merit on each phase of cinematography. Oscarettes are to be awarded on the basis of best editing, composition, timing, photography, sound recording, etc. Prizes will be permanently held by the winners, with additional ones to be awarded annually. Currently, a special committee is formulating the rules for the contest.

PSA Annual Exhibit Color Photography Oct. 30-Nov. 2

Annual exhibit of color photography will be held by Photographic Society of America at Rochester, Oct. 30 to Nov. 2 during the annual meeting of PSA. It is expected that several thousand prints and color slides will be entered.

Jones Appointed V. P. of Olecon

Charles M. Jones, a director of the Otto K. Olecon Company of Hollywood, has been appointed a vice president of the corporation Olecon Company will distribute the new RCA-Vector 16mm. sound projectors for commercial outlets in the southern California field.

Controlled Light for BLACK and WHITE and Color Photography



The Baby Keg-Lite

500 or 750 Watt Spot
The Baby Keg-Lite takes about 15 minutes to set up. It is a key light, and has special lighting lens, variable bulb, the design makes fine temperature and heat regulation and direction of heat control. Also light ranges between 45 degrees spot and 45 degrees flood, controlled by a small lever from back of body. Pivotal spot lens gives continuous light pickup. Stand extends from 4' 6" to 6' 6". Total weight 25 pounds.



This Dinky-Inkie is the one with the Baby Keg-Lite and gives a concentrated spot of light with sharp edges in either spot or rectangular beam. Beamline also projects in line ranging from 15° to 60° in diameter. No background effects may be obtained with pointed edges.



COLOR photography is the thing, but if it's to be color you must be able to control your light, and you will need Bardwell & McAlister Lighting Equipment for good work.

Bardwell & McAlister Lighting Equipment was originally designed for color as well as black and white. For over fifteen years, our engineers in consultation with the cameramen of Hollywood, have developed a complete line of spots and accessories which meet every requirement

of the motion picture industry. It is characteristic of all Bardwell & McAlister lights that they are cool, noiseless and optically correct.

Prism type lenses on all Bardwell & McAlister spots permit full illumination with a smooth field which can be controlled for all requirements. Bardwell & McAlister lights are the accepted standard for excellence throughout the motion picture industry. Place your orders now for early delivery. No proxies required.



The Junior Spot
1000-2000 Watts



Single Broad
500 to 750 Watts

• *Note for reference* describing the Baby Keg-Lite, The Dinky-Inkie, The Junior Spot (1000-2000 Watts), the Senior Spot (5000 Watts), the Single and Double Broad, and their accessories as shown in the accompanying illustrations. Bardwell & McAlister lighting equipment has a complete line of Stands, Diffusers, Barn Doors and other accessories for controlling light at all angles and under all conditions. Address Dept 24-16



The Double Broad
2000 Watts



The Senior Spot
5000 Watts



The Dinky-Inkie
100 to 150 Watt Spot

BARDWELL & McALISTER, INC.

Designers and Manufacturers
BOX 1310, HOLLYWOOD 28, CALIFORNIA





The author at the controls of the Argenteum gemerius YA, which was used in conducting the extensive 16mm sound film survey.

THINK EXTENT to which 16mm will have an active part in this post war world of ours is a subject of great controversy in movie circles everywhere. In a few short years this "baby" of the industry has risen from a point of minor acceptance to one that commands world-wide recognition.

In its infancy, 16mm was primarily limited to educational, advertising, and home use. With modern recording and reproducing facilities paralleling that of its big brother, however, 16 mm is no longer viewed with the skepticism of "something new." Add to the economy angle the extreme compactness and portability of this lighter weight equipment, and you score a major victory for 16mm.

The war has served as a proving ground for this heretofore neglected member of the film world and has greatly advanced the cause of 16mm in professional fields. Not only then from the standpoint of rapidly training the G.I. in every farflung corner of the earth to the grim ways of warfare, but also the use of morale-boosting entertainment films, has contributed to giving 16mm a new place under the sun. Just how important a part this medium of teaching and entertaining has played in winning the war can never be estimated, but the record of 16mm goes unchallenged.

The writer has been in a position to conduct a very interesting and informative survey of the 16mm sound field. Close to 25,000 feet of film was analyzed on the basis of picture quality, sound quality, and general entertainment value. Educational pictures, musicals, comedies, cartoons, travelogs, and sport reels were included in the survey, representing a fairly complete coverage of the field. Films ranging from 100-foot musical shorts to complete Universal features in

16mm were analyzed. Also given careful scrutiny was a specially prepared musical trailer, sound track only, produced by an independent laboratory for the writer, to be used for "intermission" purposes.

Months of preparation preceded the actual viewing of the films. First, catalogs were acquired from 16mm film rental libraries scattered throughout the country, from which a choice of material was to be made, avoiding impartiality to producer and distributor. Then came the tedious task of selecting the films that were to take part in the survey.

A system of indexing was set up in the form of file cards wherein was recorded such vital information as film name, black-and-white or color, literary available from, and rental rate. Each film which, after much deliberation, was considered to be a possible "candidate" for the survey was given a card of its own so which this information was recorded. If, when paging through the various catalogs it occurred that a certain chosen film was available from more than one source, the name of each library able to supply it was noted on the film's own particular card. Thus, not only a list of the various suppliers was provided for, but, in a way, the popularity of the film, itself, was attested to.

The next step was to select a representative group of libraries from whom the hand-picked films were to be supplied. Six such rental libraries, from a number of different localities, afforded about as accurate a cross-section of the 16mm industry as would be possible to attain. Booking orders were placed with the chosen distributors, with play dates carefully arranged to spread the arrival of shipments over the allotted time for

SURVEYING THE 16 MM. SOUND FILM SUPPLY

By JAMES R. OSWALD

the survey. When it is considered that such a tremendous amount of footage was to be analyzed, with the necessity of keeping track of the arrival and returning of shipments to their respective libraries at the specified time, the systematic carrying out of the procedure is better appreciated.

As the films came in, each picture was projected on the screen, and scrutinized from all angles with the most critical eyes and ears. As each reel was analyzed, the file card pertaining to the particular film being witnessed was kept near at hand, and a notation made thereon as to the picture's "rating." Films were evaluated in one of four categories or classifications . . . very good, good, fair, and poor.

The survey extended over a period of two weeks, and from it some interesting facts were derived. Rental rates on films averaged from 75¢ for a one-reel short lasting approximately 10 minutes on the screen, to \$30.00 for a complete nine-reel feature with a running time of about an hour and a half. Naturally, however, prices vary also with the prestige of the actors and the prominence of the producer. Surprisingly enough, though, the most expensive product was not always found to be the most top ranking. Some of the modern shorts, for instance, released by comparatively minor producers, were proven far superior to many of the better known "name" brands.

With the ever-increasing list of available sound films, and the extensive number of rental libraries already established, new horizons are in the offing for this medium of entertainment, not only in commercial fields, but for home use as well. Since the advent of motion pictures, many different film sizes and types have come and gone, often retaining their popularity for only a short time. From where I sit, though, one thing can be said with the utmost enthusiasm and certainty . . . 16mm sound is here to stay.



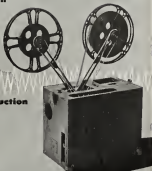
higher high



sharper voice reproduction



lower low



Widest range, clearest tone

with **VICTOR ANIMATOPHONE**

The ability to capture all the reality of voice or instrument . . . is a thrilling quality of the Victor Animatophone.

The secret lies in Victor's superb amplifier . . . its capacity to respond perfectly at voice frequency, yet reproduce the higher and lower instrumental notes. Also exclusive with Victor is the Wide Angle Sound Lens with greater focal depth for deeper scanning of the sound track. Victor's Stationary Sound Drum has no moving parts to wear or get out of order and is instantly accessible for cleaning.

Because of such features as Victor's unsurpassed sound fidelity, easier threading, brighter images and greater safety, it is first choice with thousands of educators, churchmen, industrialists and the military. Ask for additional details of the Victor Animatophone . . . the finest in 16mm craftsmanship!



VICTOR

ANIMATOGRAPH CORPORATION

Home Office and Factory: Des Moines, Iowa
New York 1181 McGraw-Hill Bldg., 333 W. 42nd St. • Chicago 121 398 W. Randolph

MAKERS OF 16MM EQUIPMENT SINCE 1923

Psychology and the Screen

(Continued from Page 161)

suggesting by means of a controlled intensity great emotional forces boiling about beneath the surface. Usually these rules have been purposely short on dialogue, allowing the player, by skillful pantomime and facial expressions, to put across ideas that would have been greatly inhibited had they been reduced to specific words. Not every player, of course, is equal to the demands of this acting by implication, but the Ingrid Bergmans, the Spencer Tracys, and the Paul Huns have become great because they know how to make one deft facial expression say more than ten pages of dialogue. A superb example of this is the performance given by Dorothy McGuire in the current release, "The Spiral Staircase." Playing the role of a maid, Miss McGuire gives a superb performance and manages to express a very complete gamut of emotions by means of skillful pantomime, speaking only seven words of dialogue throughout the entire picture. It is an axiom of screen psychology that the things left unsaid are sometimes more eloquent than those that are said.

Next to direction, the camera is the most powerful instrument in slanting a film psychologically. If a dramatic situation that is in itself interesting is given a camera treatment that complements and enhances it, the sequence is bound to draw a greater response from the audience. Added to this is the important

fact that camera angle determines the viewpoint from which the audience will see various phases of the action. The camera may be a detached, objective observer of the action, or it may now and then adopt the viewpoint of one of the characters and show subjectively how the action appears to that character. Although this viewpoint or composition continually changes throughout the unfolding of the story, it should remain consistent in its overall approach to the subject.

The film "Rebecca" is an outstanding example of camerawork perfectly adapted to the requirements of a story working with psychological undercurrents. In this film the ambient mood, electric with suspense, permeated throughout; and the camera had constantly to maintain an approach that pointed up the effect. On the other hand, "Mildred Pierce" is a picture that varied in mood from the banal atmosphere of suburban housewife to the highly keyed excitement of murder committed in a lecherous beach house. Each phase of this episodic screen story established a different mood and therefore required a differently keyed camera treatment. The final result on the screen, a changing pattern of light and shade in the handling of the camera, is a tribute to cinematographer Ernest Haller, A.S.C.

Well-executed camera movement is a device that does much to stimulate desirable audience reaction. By means of the mobile camera the spectator can be drawn in closely to the subject, raised or lowered, pulled back for a broader

view, or allowed to follow along while a player moves from one place to the other. Such movement permits a great fluidity of treatment, with the camera changing its point of view unobtrusively according to the requirements of the action.

The close-up has become an indispensable part of film technique. Its function is to focus attention onto minute details of expression or action that would otherwise be lost to the audience. It is a highly emphatic type of shot and should be used when specific details are psychologically important in the presentation of the story. Director Sam Wood effectively uses super close-ups of his players' faces in highly emotional scenes, so that no flicker of the eyelash or quiver of the chin fails to register its full impact on the audience. This technique was especially effective in "For Whom the Bell Tolls" and "Saragat Trunk."

In line with the theory of leaving certain things to the imagination, it can readily be seen how silhouette and shadow can be especially useful in putting over psychological mood. When a scene is thus presented, all distracting details are omitted so that just the broad outlines of action and the dialogue are allowed to register. A far-reaching film, "The Stranger," forcefully photographed by Russell Metty, A.S.C., makes especially potent use of silhouette in several sequences.

Not only does the camera angle itself inspire certain reactions, but the direction of action in relation to the frame can also convey nuances of meaning. For instance, a diagonal line of action from corner to corner of the frame is more dynamic than action that moves straight across the frame. Similarly, a line of action approaching the camera is more forceful than action going away from the camera.

Working closely with the camera in the production of our modern motion picture is the element of sound. It is interesting how our theories regarding audience-imagination are borne out also in this field. Once, in discussing the subject of sound with the author, Cecil DeMille said: "In some ways radio is an even more provocative medium than the motion picture. In a film, for instance, the location, the settings, the way the players represent certain characters—all of these factors appearing on the screen cannot possibly satisfy all members of the audience. But in radio where these details are not shown but are, instead, suggested by sound, the audience is free to fill in its own mental impression of how these things look, and each person's individual impression is perfect in his own mind's-eye."

Besides actually leading voice to the characters, the prime function of sound in the motion picture is to intensify the visual image, to sharpen the impact of what we see on the screen by letting us hear the sounds that go with it. Very often a certain element of sound is



"Mildred Pierce" varied in mood from documentary realism to electric suspense, and utilized a carefully changing psychological approach to achieve such opposite responses.

pounded up out of proportion to its actual importance in order to psychologically understate a big act of action. In the aforementioned film "The Stranger," there is a sequence in which a heated exchange of dialogue takes place following the running of a 16 mm. film. In this sequence the movie projector continues to operate after the film has been run through it, and the loose end of the film continuously flaps against the table-top providing a sharp rhythmic beat to point up the force of the dialogue.

A continuous pattern of sound over a series of cuts within a sequence tends to draw the separate scenes of that sequence more closely together. For instance, in a factory sequence if the sound of machinery is heard throughout, every scene interest against that sound background will be assessed by the audience to be taking place in the same locale and at the same time as other scenes shown with that same sound accompaniment. Thus, sound aids in effecting smooth continuity.

Another relative factor in the auditory phase of motion pictures is background music. Functioning to underscore the visual image, music aids in heightening abstract emotions which are often difficult to express in terms of action and dialogue. Miklos Rosas, winner of the 1945 Academy Award for his scoring of the film "Spellbound," is particularly adept at evoking musical themes which reflect psychological mood. In "Spellbound," for instance, the recurrent psychosis of the amnesiac victim was expressed by means of a haunting melody full of fear and hopelessness. Again, in "The Lost Weekend," the same composer interpreted the main character's craving for alcohol by means of a wailing musical theme that welled up periodically throughout the film, symbolizing the alcoholic's inner yearnings.

In "Dr. Jekyll and Mr. Hyde," the two sides of the main character's split personality fighting within him for possession of his soul, were symbolized by two conflicting musical themes that struggled to achieve mastery. In "Waterloo Bridge," the leading character's transformation into a prostitute was symbolized by the accompaniment of cheap honky-tonk music on the sound track as she walked the streets. In "Laura," the whole atmosphere of sophistication, mystery, and unseen horror was effectively embodied in the haunting musical theme that underscored the film.

Color, also, has a powerful psychological effect on an audience, and current color features are being designed with full attention to this detail. "Leave Her to Heaven" and "Pete Smith's Creek" are especially good examples of color used to stimulate emphatic response. It is an axiom of psychology that "warm" colors (red, orange, and purple) stimulate the emotions, whereas "cool" colors (blue, green, and yellow) tend to calm the emotions. The designers of "Gone



Director of Photography Arthur Miller, A.S.C. (left of camera in group), checks final rehearsal of shooting crowd for an overhead shot on the 1946 Century-Fox production, "Anne and the King of Sheen."

With the Wind" took full advantage of this fact, working generous amounts of warm color into the settings and costumes of the film's more highly dramatic sequences.

The precise art of film editing depends greatly upon the science of psychology. It is generally recognized that two pieces of film, taken as separate scenes, may have two separate and unrelated meanings—but that when these two scenes are joined together an entirely new dramatic concept arises out of the relationship. Actually, the final psychological effect of several strips of film cut together depends upon the approach used in assembling them, for the same fragments of action and dialogue can be made to express vastly different ideas depending upon how they are blended into an overall impression.

A good deal of the power of action and suspense films is created in the cutting

room. It is here, too, that the intangible but psychologically essential elements of pace, rhythm, and tempo are injected into the film. Editing requires a certain "feel" for dramatic values plus a keen understanding of audience psychology. The effectiveness of an entire film may hinge on how intelligently the separate scenes and sequences are fused into an integrated dramatic pattern.

In conclusion we may say that the modern motion picture is a blending of mechanical and creative arts slanted to the respectivity of the great mass-aided we call the audience. Because the film appeals to the mind and to the emotions, psychology and the screen are inseparably bound up together. A closer understanding of this abstract but universal science on the part of film-makers will result in pictures that more effectively fulfill their major responsibility to entertain the public.

Current Assignments of A. S. C. Members

As this issue went to press, members of American Society of Cinematographers were engaged in the Hollywood studios as Directors of Photography on feature productions as follows:

Columbia Studios

Burnett Coffey, "Callan's Journey," with Glenn Ford, Janet Blair, Henry Travers, Charles Ruggles.

Buddy Mait, "Down to Earth," (Technicolor), with Rita Hayworth, Larry

Parks, Edward Everett Horton, James Gleason.

Phil Tannura, "Cowboy Blues," with Ken Curtis, Jeff Donnell, Robert Scott, George Meehan, Jr., "Big White Yee Dance," with Ellen Drew, Robert Stanton, Amanda Lane.

Charles Lawton, "Rio," with Evelyn Keyes, Ann Miller, Tito Guizar, Allyn Joslyn, Velma and Yolanda.

Henry Freulich, "His Face Was Their

Fortune," with Anita Louise, Michael Dainger, Ted Donahue.

Hal Roach Studios

John W. Boyle, "Curley," (Cinecolor), with Frances Rafferty, Larry Olsen, Edna Jansen.

International Pictures

Lucien Ballard, "Belita Donna," with Marie O'Brien, George Brent, Charles Korvin, Paul Lukas, Lenore Ulric.

Metro-Goldwyn-Mayer

Harry Stradling, "Till the Clouds Roll By," (Technicolor), with Robert Walker, Judy Garland, Frank Sinatra, Kathryn Grayson, Van Johnson.

Karl Freund, "Undercurrent," with Katherine Hepburn, Robert Taylor, Robert Mitchum.

Robert Sarsen, "Tenth Avenue Angel," with Margaret O'Brien, George Murphy.

Hal Rosson, "My Brother Who Talked to Horses," with Peter Lawford, Beverly Tyler, Ruth Jenkins.

Joseph Kattzenberg, "A Woman of My Own," with Greer Garson, Richard Hart, Bob Mitchell, Florence Bates.

Robert Pinick, "Uncle Andy Hardy," with Mickey Rooney, Beulah Greenwell, Charles Schenck, "The Mighty McGarh," with Wallace Beery, Aline MacMahon.

Monogram

William Seidman, "Jade Lady," with Kane Richmond, Barbara Reed.

Paramount

Daniel Fapp, "Suddenly It's Spring," with Fred MacMurray, Paulette Goddard, Macdonald Carey, Arleen Whelan.

Ray Bernbach, "Fertile of Pauline," (Technicolor), with Betty Hutton, John Lund, William Demarest, Billy De Wolfe, Cassandre Collier.

William Mellor, "Welcome Stranger," with Bing Crosby, Barry Fitzgerald, Joan Caulfield.

Charles Lang, "Where There's Life," with Bob Hope, Signe Hasso, William Bend Sin.

Jack Greenhalgh, "Fear Is the Night," (Fox-Thomas Prod.), with Paul Kelly, DeForest Kelley, Robert Emmett Keane, Ann Doran.

RKO Studios

Vincent Parnes, "Miner's Hayride," with Martha O'Driscoll, William Wright.

RKO Studios

George Barnes, "Bridal the Baller," (Technicolor), with Douglas Fairbanks, Jr., Maureen O'Hara, Walter Slezak, Jane Green.

Nick Muscarella, "What Nancy Wanted," with Lamine Day, Brian Aherne, Robert Mitchum, Gene Raymond, Fay Helm.

Edward Croninger, "Honeymoon," with Shirley Temple, Franchot Tone.

Harry Wild, "The Falcon's Adventure,"

BALTAR

...for your specialized requirement

Baltar is the Bausch & Lomb answer to the demand for a lens series of superlative performance—both for color and black-and-white—to the existing and specialized needs of the most advanced 35mm motion picture photography. Baltar's anti-reflection coated Bausch & Lomb Optical Co., 595 Smith St., Rochester 2, N. Y.

Baltar are available through manufacturers of motion picture camera equipment

BAUSCH & LOMB
ESTABLISHED 1811

Various lens models are shown with labels indicating their specifications: 135mm f2.8, 135mm f2.8, 135mm f2.8, 135mm f2.8, 135mm f2.8, 135mm f2.8, 135mm f2.8, 135mm f2.8, 135mm f2.8, 135mm f2.8.

8 Enlarged TO 16 Reduced TO 8

Gen. W. Colburn Laboratory

Special Motion Picture Printing
44 NORTHWICK DRIVE
CHICAGO 5, ILL.

ture," with Tom Conway, Madge Mearns.

Victor Milner, "It's a Wonderful Life," (Liberty Films), with James Stewart, Donna Reed, Lionel Barrymore, Thomas Mitchell.

Samuel Goldwyn Productions

Lee Garmes, "The Secret Life of Walter Mitty," (Technicolor), with Danny Kaye, Virginia Mayo, Fay Bainter, Boris Karloff.

Gregg Toland, "The Best Years of Our Lives," with Myrna Loy, Fredric March, Dana Andrews, Teresa Wright.

Republic

Archibald Stout, "Angel and the Outlaw," with John Wayne, Irene Rich, Gail Russell, Bruce Cabot, Harry Carey.

20th Century-Fox

Leon Shamroy, "Forever Amber," (Technicolor), with Peggy Cummins, Carroll Wilde, Vincent Price, Glenn Langan, Reginald Gardner.

Anthony Miller, "The Razor's Edge," with Tyrone Power, Gene Tierney, John Payne, Anne Baxter, Herbert Marshall, Anne Rivers.

Joe MacDonnell, "My Darling Clementine," with Henry Fonda, Linda Darnell, Victor Mature, Cathy Downs, Walter Brennan, Ward Bond.

Harry Jackson, "Carnival in Costa Rica," (Technicolor), with Dick Haymes, Celeste Holm, Cesar Romero, Venetia.

Glen MacWilliams, "That's For Me," with Vivian Blaine, Harry James, Carmen Miranda, Perry Como, Phil Silvers.

United Artists

Karl Struss, "The Short Happy Life of Francis Macomber," (Award Productions), with Gregory Peck, Joan Bennett, Robert Preston, Reginald Denny.

Robert Pittcock, "Little Ladies," (Cineast Productions), with Jo Ann Marlowe, Marc Conner, Eve Whitney.

Leo Tover, "Abe's Irish Rose," (Crosby Productions, Inc.), with Jeanne Dra, Michael Chekhov, George E. Stone, Vera Gordon.

Bert Glennon, "The Red House," (Sol Lesser Productions), with Edward G. Robinson, Lon McAllister, Aileen Roberts.

Universal

Paul Iwano, "The Black Angel," with Dan Duryea, June Vincent, Peter Lorre, Wallace Ford.

Vincent Miller, "The Michigan Kid," (Greencore), with Jon Hall, Rita Johnson, Victor McLaglen, Andy Devine.

Hal Mohr, "Prisoners of Monterey," (Technicolor), with Maria Montez, Rod Cameron, Philip Reed.

George Robinson, "Oh Say Can You Sing," with Sheila Ryan, Fred Brady.

Elwood Berrell, "The Killers," (Mark Hellinger Productions), with Bart Lancaster, Ava Gardner, Albert Dekker.

Warner Brothers

Sol Polito, "Clock and Dagger," (United States Pictures), with Gary Cooper, Lilli Palmer, Robert Alva.

Sol Polito, "Cheyenne," with Jane Wyman, Dennis Morgan, Janis Paige.

Arthur Edison, "Station Road," with

LABORATORY 16 M SERVICES 35 M

QUALITY BACKED BY 40 YEARS IN THE
CINEMA LABORATORY AND EQUIPMENT FIELD

- * Endless Reproductions
- * Rewinds and Reductions
- * Projection Service
- * Slide Films

- * Sound Recording
- * Portable Sound Units
- * Cutting Rooms
- * Vault Storage Service

ALL IN ONE PACKAGE



HOLLYWOOD COLORFILM CORPORATION

230 West Olive Avenue

Burbank, Calif.

Auricon SOUND-ON-FILM

RCA Licensed Equipment

Records on black and white or Kolorchrome

Manufacturers of
SOUND ON FILM
RECORDING
EQUIPMENT
Since 1931



Complete 16 MM SINGLE SYSTEM
OUTFIT FOR PROFESSIONAL RESULTS

- ✓ And the Auricon Camera is a lightweight unit with built-in microphone and 16 mm film magazine.
- ✓ With a built-in 16 mm film magazine.
- ✓ Amplifier with two channels. First and second channels for stereo or mono recording. Built-in microphone, built-in amplifier, built-in 16 mm film magazine.
- ✓ Professional quality film. Kodak 16 mm film and 16 mm film magazine.
- ✓ Film and built-in 16 mm film magazine.
- ✓ Professional quality film. Kodak 16 mm film and 16 mm film magazine.

COMPLETE OUTFIT READY TO
SHOOT. ALL YOU NEED IS FILM
1640 00-P O B. Los Angeles

E. M. BERNDT CORP.

7377 BEVERLY BOULEVARD,
LOS ANGELES 28, CALIFORNIA

Zachary Scott, Ronald Reagan, Alexis Smith.

Peveril Mealey, William Hall, "Life With Father," (Technicolor), with Irene Dunne, William Powell, Elizabeth Taylor, Zasu Pitts.

Ernest Haller, "Deception," with Betty Davis, Paul Henreid, Claude Rains.

"GOERZ AMERICAN" PRECISION PHOTO LENSES

An American Product Since 1899

46 YEARS IN THE FRONT LINE OF
PHOTO-OPTICAL EQUIPMENT

Because of their excellence in performance in all branches of photography, in war or peace, the demand for them has tremendously increased.

It will still take quite some time to fill our heavy backlog of orders for so many different types and sizes, and build up our over-depleted stock for prompt shipment to the dealers all over.

To assure yourself of the widest possible choice, we urge you to place NOW through your dealer your order for the lens you have selected. You will be repaid for your patience manifold with the satisfaction derived from its use later.

REMEMBER:

For making first-class pictures, a

"GOERZ AMERICAN"

lens will give you a lifetime of pleasure.

The C. P. GOERZ AMERICAN

OPTICAL COMPANY

OFFICE AND FACTORY

317 East 146th St., New York 16, N. Y.

AC-5

Bell & Howell 1945 Earnings \$1.29 per Common Share

With net sales reaching an all-time peak of \$21,666,971.69 in 1945, despite heavy cut-backs in government orders following V-J Day, Bell & Howell Company, Chicago makers of precision photographic equipment for 29 years, enjoyed the most productive year in its history. It is revealed in its annual report to stockholders, just released.

According to J. H. McNabb, president and chairman of the board, net earnings of the corporation aggregated \$972,494.35 for the fiscal year ended December 31, 1945, after provision for Federal income and excess profits taxes amounting to \$5,005,228.71. After payment of dividends totaling \$77,250 on the cumulative preferred stock, 4½% series, the net profit was equivalent to \$1.29 per share on the 482,575 shares of common stock, \$28 per value outstanding.

Facilities Greatly Enlarged

Bell & Howell has now exercised its option to purchase the 24-million-dollar Lincolnwood plant from the Reconstruction Finance Corporation at a price which has not yet been determined. In 1945, a 25,500-square foot storage warehouse was built adjacent to the main Lincolnwood plant. Now, construction has begun on a new Lincolnwood factory building, designated as Plant No. 7, affording 85,000 additional square feet of floor space. "With these new plants and facilities, Bell & Howell will have tripled its pre-war physical capacity, since both the Larchmont and Rockwell plants are to be in full production on new lines of merchandise," Mr. McNabb states. Negotiations of an international nature, have greatly augmented previous facilities also.

Conventions begun in June, 1945, between J. Arthur Rank, leading figure in the British motion picture field, and J. H. McNabb resulted in the finalizing of agreements, reported recently, whereby Bell & Howell, the Rank Companies, and British Associated Films, Ltd. will pool manufacturing interests to a considerable extent. This arrangement has consolidated the Bell & Howell position in international trade, and it is felt that

such integration will be reflected in subsequent operational and merchandising performances.

Mobile Service Unit Introduced

In line with the company policy of making only precision equipment and maintaining it at maximum efficiency thereafter, Mrs. McNabb in 1945 inaugurated a "mobile service unit" system consisting of completely equipped trailers, staffed by experts. These units, which are to be operated by Bell & Howell special representatives in large numbers, are designed to afford on-the-spot attention to owners of Bell & Howell equipment throughout the country. This innovation has bolstered the firm's already efficient service organization, the nucleus of which is 60 strategically located authorized service stations and factory branches.

Company Outlook Told

Regarding the outlook for the photographic industry in general, and Bell & Howell in particular, Mr. McNabb stated, in concluding his annual report, "We believe the photographic industry to be on the brink of a new peace-time era which is destined to remove it from the luxury classification to its rightful position as a basic necessity for home, school, church, community, and industry." The company, he went on to state, "is charged to a broadened and even higher position of leadership within this industry than it has ever before held."

Hints on Preserving Your Phonograph Records

As more and more amateur movie makers are utilizing phonograph records to provide music background sound accompaniment for personally-made subjects, the following abstract from the lecture, "Sound for the Amateur Movie Maker," presented by J. C. Vogel at November meeting of Metropolitan Motion Picture Club of New York, is particularly informative.

Keep just records in silhou or envelop to protect them from dust.

Do not use brushes to clean records—they are apt to leave more dust than they remove. One authority advises that dusty records be washed with cold running water and dried with a silk cloth.

Do not use lubricants or fluids to preserve records. They collect dust and irregularly block up the tiny grooves.

Do not use ordinary phonograph needles, cartrons, thorns or fibre needles on home-cut records. Sapphire Stylus is preferable.

Do not use a heavy pick-up if you expect home-cut records to last for some time. If a heavy pick-up is unavoidable, use a bent shank playing needle.

Do not store records horizontally in a pile. Always stand them on edge so that the weight will not push them together.

Do not store records in excessively hot, cold, dry or humid places. Store them where people live. Where people can exist, so can records.

RENTALS SALES SERVICE

MITCHELL

Standard, Silenced, N. G., Hi-Speed, Precision, and Syncro Cameras.

BELL & HOWELL

(USED)

Fearless Blimps and Panoram Dollies—Synchronizers—Moviolas—35mm Double System Recording Equipment

(USED)

WE SPECIALIZE IN REPAIR WORK ON MITCHELL AND BELL & HOWELL CAMERAS

CAMERA

FLANK ZUCKER

CABLE ADDRESS CINQUIP

1600 BROADWAY

CIRCLE 6-5000

Aces of the Camera

(Continued from Page 19)

hard taskmaster with a keen appreciation of those skills requisite to a first-class job of cinematography. Bob's entrance into the camera fraternity had been entirely the result of and the requirements of the coaching Mr. Brown, who decided to teach Bob the intricacies of the business. At Karl Brown's insistence, and under his helpful guidance, Bob studied the science of optics, delved into the chemistry of photography, the details of laboratory procedure, and anything else that would give him a greater knowledge of his chosen profession.

He must have been an apt pupil because he remained with Karl Brown for six years. During those years that camera teams made pictures that have come to be considered among the milestones marking the technical and artistic progress of the motion picture industry. Among them were the *James Craig* epics, including "The Covered Wagon" and Bob's camera was one of those that photographed "The Ten Commandments" for C. B. DeMille.

The resourcefulness he learned during the years with Brown stood Bob in good stead on his next picture. In 1926 Karl Brown became a director, and his first assignment was entitled, "Starck Love", which was to be Hollywood's first attempt at realism, using what is now known as "documentary" technique, as applied to a feature picture. It called for the use of local talent filmed in indigenous surroundings. The locale was the South.

With Paul Wing as assistant director and production manager, Jimmy Murray and Bob Pittack on the camera, Karl Brown toured the South getting "Starck Love". And, while capturing the natural reactions of some of the natives in their natural habitat, gave his crew a terrific workout and every possible opportunity to prove their ability to be adaptable. The fact that most of the "actors" had never before seen a movie camera didn't help. But the high praise the picture received at the time of its screening is eloquent testimony of the quality of the product despite the hazards of production.

When Bob went to Paramount he was again fortunate to come under the aegis of two more top-ranking cameramen. First, he worked with Al Gilke, A. S. C., now Commander Gilke who more recently did such an outstanding job training cameramen for the Navy; then with Charles Lang, A. S. C., photographing the Ruth Chatterton pictures With Lang he also shot, "Farewell to Arms," the Academy Award winner, and "Love of a Bengal Lancer."

When Emanuel Cohen left Paramount to form his own company, Mayer Pictures, he invited Bob to go along as production cameraman like first picture, for Columbia release, was the highly rated Bing Crosby starrer, "Persecution from Heaven."

After a couple of years shooting the

popular Charlie Ruggles and Alice Brady series Bob went to Metro-Goldwyn-Mayer to make shorts and shoot for several years — assignments that frequently call for the utmost in skill and dependability but which result in little, if any, recognition or critical acclaim.

Then Bob photographed the first picture to star Jean Harlow as Dr. Christian, a production that was to launch that kindly radio to international fame in radio as well as pictures. He also did the Bill Bendix and Bill Tracy series for Hal Roach.

Another independent producer who has proved time and again that he knows what's what at the box office, Edward Small, has made good use of the Pittack talents to assure himself photographic excellence for some of his hits.

Bob Pittack is at the peak of his career. His background and experience has been sufficiently long and varied to give his work mellowness and authority; which, coupled with his imaginative approach contributes those elements to a production that a producer has the right to expect from his Director of Cinematography.

It is to be hoped that the anticipated success of "The Son of Harold Diddleback" will not only assure the navigators of the world the continued efforts of these brilliant talents Sturges and Lloyd, but will also assure Robert Pattack, A. S. C., continuing recognition as one of Hollywood's top-ranking Aces of the Camera.

SMPE Technical Conference in New York May 6-10

One of the most informative Technical Conferences of the Society of Motion Picture Engineers since the outbreak of the war will be held at the Hotel Pennsylvania, New York City, May 6th to 10th. In order to accommodate the largest and most ambitious program of papers on new technical and engineering practices ever conducted on the Atlantic coast, the meeting has been extended to five days instead of the customary four.

The important reports and discussions scheduled for the technical sessions, together with resumption of social features which were omitted at the society's wartime conferences, are expected to bring together one of the largest and most distinguished gatherings of motion picture engineers and scientists ever assembled.

Special program features which have been planned, according to William C. Kuzmann, convention vice-president of SMPE, include a symposium on new developments in color motion pictures, to be held Monday, May 6, in cooperation with the Inter-Society Color Council, and a group of papers on acoustics at a session on Friday, May 10, to which members of the Acoustical Society, opening its own conferences on that date, will be invited.

FOR LIGHT ON EASTERN PRODUCTION --

C. ROSS

For Lighting Equipment

As sole distributors East of the Mississippi we carry the full and complete line of latest-type Inlie and H.I.-Arc equipment manufactured by



MOLE-RICHARDSON, Inc.

Hollywood - California



Your requirements for interior or exterior locations taken care of to the last minute detail anywhere

★

MOTOR GENERATOR TRUCKS

RENTALS

SALES

SERVICE

★

CHARLES ROSS, Inc.

333 West 52nd St., New York, N.Y.

Phones: Circle 6-5470-1

Survey Current Color Processes in England

[Continued from Page 186]

usual perfection and so dominates the field of commercial colour cinematography that any discussion of its disadvantages or limitations will seem strange. Yet consideration will show that no matter how successful a process may be when judged as a technical achievement—factors will remain which are only indirectly connected with the technicalities of any given printing process, but which nevertheless would considerable influence in the sphere of motion picture production.

"For instance, the average cameraman would rather photograph in colour using his favorite type of single-film camera than with a large and complex three-strip camera, however perfectly the latter may be designed and built—and he would certainly prefer to be relieved of the overrating necessity for avoiding those chance reflections and 'against the light' effects which add so much to his

work in black-and-white, but which are so dangerous when hi-pack is being exposed in one gate of a three-colour camera.

"Most producers, too, would welcome any process which calls for no special cameras or crews and which could be processed in any one of several laboratories. Again, the public are not content to learn that an isolation colour printing process utilizing three dyes which closely approach theoretical requirements and employing silver separation negatives obtained directly from the subject is likely to produce greater accuracy in colour reproduction than a multi-layer process depending upon subtractive primaries whose hue and saturation leave much to be desired. In fact, it seems that owing to the abnormal conditions under which motion pictures are viewed, a print which would be an accurate reproduction when measured on a colorimeter will appear false to the average observer when seen on the cinema screen, while a print which has suffered degradation or desaturation will often be accepted as being 'more natural'.

Technicolor Camera

"By far the largest proportion of Technicolor photography is carried out with the renowned Technicolor camera, and while it cannot be denied that the use of such a camera is in many ways undesirable from the producer's point of view, nevertheless many of us will still admire the initiative and ingenuity which the design and construction of this camera certainly represents. It is interesting to remember that substantially the same camera as that used in the studios today was first made and used in 1933. It may be possible for Technicolor to dispense with the three-film camera in due course, but Dr. Kalmar, as recently as 1944, said that one of the intentions of his company was to offer for gradual adoption new and improved Technicolor special cameras. The colour camera itself is not so very large, but its triple magazine, weighing some 70 pounds when loaded, together with the more powerful motors which are necessary to drive the two Mitchell movements and transport the three films, all add up to a much heavier and larger outfit than anything used for black and white work. When the camera is required to be blimped the problems of size and weight do become formidable—

the full-sized blimp occupying 10 cubic feet of studio space. However, in all other respects the Technicolor camera and its associated equipment is extremely convenient and versatile.

"Despite the difficulties involved in the design of short focus lenses for use with the prism system, the camera may be used with a special wide-angle lens of the negative telephoto type giving an effective focus of 25-mm., and although this particular film gives some distortion there are in addition 38-mm., 40-mm., 100-mm., and 140-mm. lenses available. A very convenient finder is used with these lenses, a finder which remains attached to the camera whether the blimp is being used or not and which results in the separation of the finder lens by only three or four inches. In Hollywood, eight different Technicolor camera models are available to meet almost any conditions of shooting, and there are specially designed units for aerial photography, underwater work and even a three-film camera capable of operating at 96 frames per second. The overall speed rating of a Technicolor camera is probably in the neighborhood of Weston 4 to daylight, and to corrected high-intensity arc light.

"Recent patent literature shows that the technicians of Warner Brothers are concerning themselves with the design of a three-colour beam-splitter camera which provides the required set of three separation negatives on only two lengths of film. Each of the pull-down mechanisms is of the 'double-three' type, exposing only every other frame so that one of the two films, having been used as the rear element of the hi-pack, after being suitably looped, may be introduced in the second gate in such a way that the frames which were not exposed in the first gate become exposed in the second. Only half of the total length of the front film of the hi-pack is used and special means have to be devised to print the cut of step negatives which result.

"The only indication given regarding the method of printing which it is proposed to employ suggests that the 'silver' separation negatives will be used to print simultaneously in register and through the appropriate filters on to multi-layer stock of the Kodachrome type. Such a proposal emphasises the importance which the patentees attach to the use of 'silver' separation negatives as the starting point in achieving colour printing. The Rensselaer built their first three-colour camera in 1930; it is known as



Bass pays CASH!
for your camera and equipment

I want to buy your

- Coritas
- Leica
- Graphicar
- Ministars
- Cameras

Send in or . . . merchandise returned postpaid if not entirely satisfied

Bass Camera Co.
129 N. MARSHALL ST.
CHICAGO 5, ILL.

CAMERA SUPPLY COMPANY

ART REEVES

1518 North Chicago Boulevard

Cal's Address—Camera

CALIFORNIA

HOLLYWOOD

Efficient—Courteous Service

New and Used Equipment

Bought—Sold—Rented

Everything Photographic

Professional and Amateur

An unusually fine variety of basic photo chemicals always in stock.

BUY VICTORY BONDS

MOVIOLA

FILM EDITING EQUIPMENT

Used in every major studio
(Illustrated Diagrams on Request)

Manufactured by

MOVIOLA MANUFACTURING CO.

1800 Gordon Street Hollywood 28, Calif.

3K8-3, and was made in Leningrad to the design of A. A. Nini. The camera employs a prism block beam-splitter and uses tri-pack in one of the two Mitchell type gates.

Kodachrome

"Kodachrome was the first successful multi-layer color film, and it has been in continuous use in sub-standard sizes since 1935. A similar 35-mm stock, now known as "Monopak," seems to be used solely by Technicolor in normal cameras as an occasional alternative to their three-step method. However, the use of Kodachrome or "Monopak" does entail a very complicated chain of processing operations, and it has recently been stated that Technicolor's interest in integral tri-pack is at present only confined to the master film because it appears that three-layer raw material is inherently so expensive that it could not compete in cost with Technicolor exhibition prints for release purposes.

AgfaColor and Ansco Color Stock

"Just at present, many people feel that the future of color cinematography rests with the AgfaColor or Ansco Color type of process. There is a similarity between Kodachrome and the Agfa and Ansco materials in that all of them are integral tri-packs or monopacks which automatically separate the image of a colored scene when exposed in an ordinary camera, but after exposure the similarity ceases, and the two types of material must undergo entirely different processing.

"AgfaColor was originally processed by reversal, and this technique seems to have been adopted by Ansco in America. A special soft gradation taking material is used when 35-mm. duplicate copies are required—the film, while of the reversal type, has a much lower contrast than the normal reversal and is itself unsuitable for projection. The soft material is intended to be used as a "master" from which release prints are made on normal Ansco Color reversal duplicating stock.

Burning Up

"Some of us believe that of the greatest accuracy of color rendering together with the highest photographic quality are the primary factors to be considered.

then "silver" separation negatives must be obtained directly from the subject, either by means of a suitable three-film camera or with the aid of a silver image tri-pack which is integral at the time of its exposure but which can be separated during processing. Others claim that the logical people to shoulder the principal burden of providing color are the sensitive materials manufacturers, who must be looked to for producing multi-layer materials which will permit the use of ordinary cameras and something like ordinary processing. However, those who hold the latter view do not always realize what immense problems are involved in the consistent commercial production of such materials, nor do they always fully realize their inevitably high cost.

"Certainly we cannot ignore the 'imitation' of Dr. Herbert Kalmus, who as President and General Manager of Technicolor Incorporated and Technicolor, Ltd., last year found himself in the unusual position of being able to tell his stockholders that his management questioned whether Technicolor might not be healthier and happier if sound efficient competition arose to share with it the progress of serving the industry with ever-improving color quality and steadily lowering costs."

New Optical Printing Enterprise

Donald Marshall, recently released from the Navy where he was associated with the training film and motion picture branches as a Lt. Commander, has launched a 35 mm. optical printing business in Burbank as service for motion-film producers. He will specialize in all phases of optical printing for 16 mm. as is provided by regular studio departments for production.

Special Commendation from Navy for Leonard Roos. A.S.C.

Leonard Roos, A. S. C., globe trotting cinematographer, recently received a special commendation from the Navy, with the scroll signed by Secretary James Forrestal and Rear Admiral Miller. Citation reads: "For outstanding performance and service rendered to the United States at war as an accredited Navy war correspondent."

Term Contract for Art Arling, A.S.C.

Arthur E. Arling has been signed to a term contract by 20th Century-Fox studios as a cinematographer specializing in color photography. During the war, Arling was a Lieutenant Commander in the Navy photographic service, and previously had been a staff cameraman at Technicolor.

RUBY CAMERA EXCHANGE

Rents... Sells... Exchanges

Everything You Need for the
PRODUCTION & PROJECTION
of Motion Pictures Provided
by a Veterans Organization
of Specialists

35 mm. 16 mm.

IN BUSINESS SINCE 1914

729 Seventh Ave., New York City
Cable Address: RUBECAM



LENSES for Today and the Future

B&H-THO Cine Lenses are not merely ideally corrected for today's cineochrome and color work, their design anticipates the possibility of future improvements in film emulsions. That they are long-term investments. Write for details.

BELL & HOWELL COMPANY

Exclusive world distributors
1845 Lombard Avenue, Chicago
New York: 30 Rockefeller Place
Hollywood: 7184 Lasker Ave.
Washington, D. C.: 1011 G St., N. W.
London: 15-16 Great Castle St.

BUY VICTORY BONDS

EVERYTHING PHOTOGRAPHIC

AND CINEMATIC

FOR PROFESSIONAL AND AMATEUR

The World's Largest Variety of Cameras and Projectors, Studio and Laboratory Equipment with Latest Improvements at Hand in the Hollywood Studios. Now and Used. BARGAINS.

Hollywood Camera Exchange

1100 CAMERON BOULEVARD
HO 3181 Hollywood, California Cable: HOSCAM



Jet Photographic Plane Being Tested by AAF

America's first jet photographic airplane, the XFP-80A, is being tested in photographic flight experiments, officials of Air Materiel Command, Wright Field, Dayton, Ohio, announced recently.

A modified P-40, the XFP-80A is being tested under the joint supervision of the Lockheed Aircraft Corporation, manufacturers of the plane and AMC. The tests to date have shown the plane permits much improved aerial photographs and greater interchangeability.

Owing to the lack of vibration from the jet engine, pictures have been taken from an altitude as high as 35,000 feet and the results have been remarkably clear.

The jet installation in the XFP-80A affords interchangeability from fighter to photographic plane with so much ease it can almost be called a two-in-one plane. The removal of just four bolts and the armed foot of the P-40 can be replaced with the nose containing the camera of the XFP-80A. Thus, plus the relatively simple job of connecting the camera controls within the cockpit, in all that need be done to make the plane ready for flight as a photographic plane.

A problem presented by the excessive speed of the P-40 was that of mounting the pilot in precariously pictures of the nose with which he was concerned. In answer, a new device called the View Finder was designed. This View Finder is expected to be installed on the XFP-80A and will work similar to a bomb sight. Its physical appearance can be likened somewhat to that of a submarine periscope.

With the View Finder, no matter how great the flying speed, the pilot is able to determine, far in advance of taking the picture, that he has the particular area he wishes to photograph in the sights of the camera lens.

Sound Services, Inc.

1021 Seward St.
Hollywood 38, Calif.

COMPLETE
SOUND SERVICE
FOR THE
INDEPENDENT
PRODUCER
35 MM.—16 MM.

Western Electric
RECORDING



FOR SALE

WE BUY, SELL, AND RENT PROFESSIONAL AND HOME EQUIPMENT NOW AND HERE. WE ARE DISTRIBUTORS FOR ALL CARS, INC. MANUFACTURERS. BUY! CAMERA EXCHANGE, 701 South Ave., New York City. Established since 1918.

12" BFM TRANSCRIPTION Record Player, Amplifier, Stylus, 1000, 1100, 1200, 1300, 1400, 1500, 1600, 1700, 1800, 1900, 2000, 2100, 2200, 2300, 2400, 2500, 2600, 2700, 2800, 2900, 3000, 3100, 3200, 3300, 3400, 3500, 3600, 3700, 3800, 3900, 4000, 4100, 4200, 4300, 4400, 4500, 4600, 4700, 4800, 4900, 5000, 5100, 5200, 5300, 5400, 5500, 5600, 5700, 5800, 5900, 6000, 6100, 6200, 6300, 6400, 6500, 6600, 6700, 6800, 6900, 7000, 7100, 7200, 7300, 7400, 7500, 7600, 7700, 7800, 7900, 8000, 8100, 8200, 8300, 8400, 8500, 8600, 8700, 8800, 8900, 9000, 9100, 9200, 9300, 9400, 9500, 9600, 9700, 9800, 9900, 10000, 10100, 10200, 10300, 10400, 10500, 10600, 10700, 10800, 10900, 11000, 11100, 11200, 11300, 11400, 11500, 11600, 11700, 11800, 11900, 12000, 12100, 12200, 12300, 12400, 12500, 12600, 12700, 12800, 12900, 13000, 13100, 13200, 13300, 13400, 13500, 13600, 13700, 13800, 13900, 14000, 14100, 14200, 14300, 14400, 14500, 14600, 14700, 14800, 14900, 15000, 15100, 15200, 15300, 15400, 15500, 15600, 15700, 15800, 15900, 16000, 16100, 16200, 16300, 16400, 16500, 16600, 16700, 16800, 16900, 17000, 17100, 17200, 17300, 17400, 17500, 17600, 17700, 17800, 17900, 18000, 18100, 18200, 18300, 18400, 18500, 18600, 18700, 18800, 18900, 19000, 19100, 19200, 19300, 19400, 19500, 19600, 19700, 19800, 19900, 20000, 20100, 20200, 20300, 20400, 20500, 20600, 20700, 20800, 20900, 21000, 21100, 21200, 21300, 21400, 21500, 21600, 21700, 21800, 21900, 22000, 22100, 22200, 22300, 22400, 22500, 22600, 22700, 22800, 22900, 23000, 23100, 23200, 23300, 23400, 23500, 23600, 23700, 23800, 23900, 24000, 24100, 24200, 24300, 24400, 24500, 24600, 24700, 24800, 24900, 25000, 25100, 25200, 25300, 25400, 25500, 25600, 25700, 25800, 25900, 26000, 26100, 26200, 26300, 26400, 26500, 26600, 26700, 26800, 26900, 27000, 27100, 27200, 27300, 27400, 27500, 27600, 27700, 27800, 27900, 28000, 28100, 28200, 28300, 28400, 28500, 28600, 28700, 28800, 28900, 29000, 29100, 29200, 29300, 29400, 29500, 29600, 29700, 29800, 29900, 30000, 30100, 30200, 30300, 30400, 30500, 30600, 30700, 30800, 30900, 31000, 31100, 31200, 31300, 31400, 31500, 31600, 31700, 31800, 31900, 32000, 32100, 32200, 32300, 32400, 32500, 32600, 32700, 32800, 32900, 33000, 33100, 33200, 33300, 33400, 33500, 33600, 33700, 33800, 33900, 34000, 34100, 34200, 34300, 34400, 34500, 34600, 34700, 34800, 34900, 35000, 35100, 35200, 35300, 35400, 35500, 35600, 35700, 35800, 35900, 36000, 36100, 36200, 36300, 36400, 36500, 36600, 36700, 36800, 36900, 37000, 37100, 37200, 37300, 37400, 37500, 37600, 37700, 37800, 37900, 38000, 38100, 38200, 38300, 38400, 38500, 38600, 38700, 38800, 38900, 39000, 39100, 39200, 39300, 39400, 39500, 39600, 39700, 39800, 39900, 40000, 40100, 40200, 40300, 40400, 40500, 40600, 40700, 40800, 40900, 41000, 41100, 41200, 41300, 41400, 41500, 41600, 41700, 41800, 41900, 42000, 42100, 42200, 42300, 42400, 42500, 42600, 42700, 42800, 42900, 43000, 43100, 43200, 43300, 43400, 43500, 43600, 43700, 43800, 43900, 44000, 44100, 44200, 44300, 44400, 44500, 44600, 44700, 44800, 44900, 45000, 45100, 45200, 45300, 45400, 45500, 45600, 45700, 45800, 45900, 46000, 46100, 46200, 46300, 46400, 46500, 46600, 46700, 46800, 46900, 47000, 47100, 47200, 47300, 47400, 47500, 47600, 47700, 47800, 47900, 48000, 48100, 48200, 48300, 48400, 48500, 48600, 48700, 48800, 48900, 49000, 49100, 49200, 49300, 49400, 49500, 49600, 49700, 49800, 49900, 50000, 50100, 50200, 50300, 50400, 50500, 50600, 50700, 50800, 50900, 51000, 51100, 51200, 51300, 51400, 51500, 51600, 51700, 51800, 51900, 52000, 52100, 52200, 52300, 52400, 52500, 52600, 52700, 52800, 52900, 53000, 53100, 53200, 53300, 53400, 53500, 53600, 53700, 53800, 53900, 54000, 54100, 54200, 54300, 54400, 54500, 54600, 54700, 54800, 54900, 55000, 55100, 55200, 55300, 55400, 55500, 55600, 55700, 55800, 55900, 56000, 56100, 56200, 56300, 56400, 56500, 56600, 56700, 56800, 56900, 57000, 57100, 57200, 57300, 57400, 57500, 57600, 57700, 57800, 57900, 58000, 58100, 58200, 58300, 58400, 58500, 58600, 58700, 58800, 58900, 59000, 59100, 59200, 59300, 59400, 59500, 59600, 59700, 59800, 59900, 60000, 60100, 60200, 60300, 60400, 60500, 60600, 60700, 60800, 60900, 61000, 61100, 61200, 61300, 61400, 61500, 61600, 61700, 61800, 61900, 62000, 62100, 62200, 62300, 62400, 62500, 62600, 62700, 62800, 62900, 63000, 63100, 63200, 63300, 63400, 63500, 63600, 63700, 63800, 63900, 64000, 64100, 64200, 64300, 64400, 64500, 64600, 64700, 64800, 64900, 65000, 65100, 65200, 65300, 65400, 65500, 65600, 65700, 65800, 65900, 66000, 66100, 66200, 66300, 66400, 66500, 66600, 66700, 66800, 66900, 67000, 67100, 67200, 67300, 67400, 67500, 67600, 67700, 67800, 67900, 68000, 68100, 68200, 68300, 68400, 68500, 68600, 68700, 68800, 68900, 69000, 69100, 69200, 69300, 69400, 69500, 69600, 69700, 69800, 69900, 70000, 70100, 70200, 70300, 70400, 70500, 70600, 70700, 70800, 70900, 71000, 71100, 71200, 71300, 71400, 71500, 71600, 71700, 71800, 71900, 72000, 72100, 72200, 72300, 72400, 72500, 72600, 72700, 72800, 72900, 73000, 73100, 73200, 73300, 73400, 73500, 73600, 73700, 73800, 73900, 74000, 74100, 74200, 74300, 74400, 74500, 74600, 74700, 74800, 74900, 75000, 75100, 75200, 75300, 75400, 75500, 75600, 75700, 75800, 75900, 76000, 76100, 76200, 76300, 76400, 76500, 76600, 76700, 76800, 76900, 77000, 77100, 77200, 77300, 77400, 77500, 77600, 77700, 77800, 77900, 78000, 78100, 78200, 78300, 78400, 78500, 78600, 78700, 78800, 78900, 79000, 79100, 79200, 79300, 79400, 79500, 79600, 79700, 79800, 79900, 80000, 80100, 80200, 80300, 80400, 80500, 80600, 80700, 80800, 80900, 81000, 81100, 81200, 81300, 81400, 81500, 81600, 81700, 81800, 81900, 82000, 82100, 82200, 82300, 82400, 82500, 82600, 82700, 82800, 82900, 83000, 83100, 83200, 83300, 83400, 83500, 83600, 83700, 83800, 83900, 84000, 84100, 84200, 84300, 84400, 84500, 84600, 84700, 84800, 84900, 85000, 85100, 85200, 85300, 85400, 85500, 85600, 85700, 85800, 85900, 86000, 86100, 86200, 86300, 86400, 86500, 86600, 86700, 86800, 86900, 87000, 87100, 87200, 87300, 87400, 87500, 87600, 87700, 87800, 87900, 88000, 88100, 88200, 88300, 88400, 88500, 88600, 88700, 88800, 88900, 89000, 89100, 89200, 89300, 89400, 89500, 89600, 89700, 89800, 89900, 90000, 90100, 90200, 90300, 90400, 90500, 90600, 90700, 90800, 90900, 91000, 91100, 91200, 91300, 91400, 91500, 91600, 91700, 91800, 91900, 92000, 92100, 92200, 92300, 92400, 92500, 92600, 92700, 92800, 92900, 93000, 93100, 93200, 93300, 93400, 93500, 93600, 93700, 93800, 93900, 94000, 94100, 94200, 94300, 94400, 94500, 94600, 94700, 94800, 94900, 95000, 95100, 95200, 95300, 95400, 95500, 95600, 95700, 95800, 95900, 96000, 96100, 96200, 96300, 96400, 96500, 96600, 96700, 96800, 96900, 97000, 97100, 97200, 97300, 97400, 97500, 97600, 97700, 97800, 97900, 98000, 98100, 98200, 98300, 98400, 98500, 98600, 98700, 98800, 98900, 99000, 99100, 99200, 99300, 99400, 99500, 99600, 99700, 99800, 99900, 100000, 100100, 100200, 100300, 100400, 100500, 100600, 100700, 100800, 100900, 101000, 101100, 101200, 101300, 101400, 101500, 101600, 101700, 101800, 101900, 102000, 102100, 102200, 102300, 102400, 102500, 102600, 102700, 102800, 102900, 103000, 103100, 103200, 103300, 103400, 103500, 103600, 103700, 103800, 103900, 104000, 104100, 104200, 104300, 104400, 104500, 104600, 104700, 104800, 104900, 105000, 105100, 105200, 105300, 105400, 105500, 105600, 105700, 105800, 105900, 106000, 106100, 106200, 106300, 106400, 106500, 106600, 106700, 106800, 106900, 107000, 107100, 107200, 107300, 107400, 107500, 107600, 107700, 107800, 107900, 108000, 108100, 108200, 108300, 108400, 108500, 108600, 108700, 108800, 108900, 109000, 109100, 109200, 109300, 109400, 109500, 109600, 109700, 109800, 109900, 110000, 110100, 110200, 110300, 110400, 110500, 110600, 110700, 110800, 110900, 111000, 111100, 111200, 111300, 111400, 111500, 111600, 111700, 111800, 111900, 112000, 112100, 112200, 112300, 112400, 112500, 112600, 112700, 112800, 112900, 113000, 113100, 113200, 113300, 113400, 113500, 113600, 113700, 113800, 113900, 114000, 114100, 114200, 114300, 114400, 114500, 114600, 114700, 114800, 114900, 115000, 115100, 115200, 115300, 115400, 115500, 115600, 115700, 115800, 115900, 116000, 116100, 116200, 116300, 116400, 116500, 116600, 116700, 116800, 116900, 117000, 117100, 117200, 117300, 117400, 117500, 117600, 117700, 117800, 117900, 118000, 118100, 118200, 118300, 118400, 118500, 118600, 118700, 118800, 118900, 119000, 119100, 119200, 119300, 119400, 119500, 119600, 119700, 119800, 119900, 120000, 120100, 120200, 120300, 120400, 120500, 120600, 120700, 120800, 120900, 121000, 121100, 121200, 121300, 121400, 121500, 121600, 121700, 121800, 121900, 122000, 122100, 122200, 122300, 122400, 122500, 122600, 122700, 122800, 122900, 123000, 123100, 123200, 123300, 123400, 123500, 123600, 123700, 123800, 123900, 124000, 124100, 124200, 124300, 124400, 124500, 124600, 124700, 124800, 124900, 125000, 125100, 125200, 125300, 125400, 125500, 125600, 125700, 125800, 125900, 126000, 126100, 126200, 126300, 126400, 126500, 126600, 126700, 126800, 126900, 127000, 127100, 127200, 127300, 127400, 127500, 127600, 127700, 127800, 127900, 128000, 128100, 128200, 128300, 128400, 128500, 128600, 128700, 128800, 128900, 129000, 129100, 129200, 129300, 129400, 129500, 129600, 129700, 129800, 129900, 130000, 130100, 130200, 130300, 130400, 130500, 130600, 130700, 130800, 130900, 131000, 131100, 131200, 131300, 131400, 131500, 131600, 131700, 131800, 131900, 132000, 132100, 132200, 132300, 132400, 132500, 132600, 132700, 132800, 132900, 133000, 133100, 133200, 133300, 133400, 133500, 133600, 133700, 133800, 133900, 134000, 134100, 134200, 134300, 134400, 134500, 134600, 134700, 134800, 134900, 135000, 135100, 135200, 135300, 135400, 135500, 135600, 135700, 135800, 135900, 136000, 136100, 136200, 136300, 136400, 136500, 136600, 136700, 136800, 136900, 137000, 137100, 137200, 137300, 137400, 137500, 137600, 137700, 137800, 137900, 138000, 138100, 138200, 138300, 138400, 138500, 138600, 138700, 138800, 138900, 139000, 139100, 139200, 139300, 139400, 139500, 139600, 139700, 139800, 139900, 140000, 140100, 140200, 140300, 140400, 140500, 140600, 140700, 140800, 140900, 141000, 141100, 141200, 141300, 141400, 141500, 141600, 141700, 141800, 141900, 142000, 142100, 142200, 142300, 142400, 142500, 142600, 142700, 142800, 142900, 143000, 143100, 143200, 143300, 143400, 143500, 143600, 143700, 143800, 143900, 144000, 144100, 144200, 144300, 144400, 144500, 144600, 144700, 144800, 144900, 145000, 145100, 145200, 145300, 145400, 145500, 145600, 145700, 145800, 145900, 146000, 146100, 146200, 146300, 146400, 146500, 146600, 146700, 146800, 146900, 147000, 147100, 147200, 147300, 147400, 147500, 147600, 147700, 147800, 147900, 148000, 148100, 148200, 148300, 148400, 148500, 148600, 148700, 148800, 148900, 149000, 149100, 149200, 149300, 149400, 149500, 149600, 149700, 149800, 149900, 150000, 150100, 150200, 150300, 150400, 150500, 150600, 150700, 150800, 150900, 151000, 151100, 151200, 151300, 151400, 151500, 151600, 151700, 151800, 151900, 152000, 152100, 152200, 152300, 152400, 152500, 152600, 152700, 152800, 152900, 153000, 153100, 153200, 153300, 153400, 153500, 153600, 153700, 153800, 153900, 154000, 154100, 154200, 154300, 154400, 154500, 154600, 154700, 154800, 154900, 155000, 155100, 155200, 155300, 155400, 155500, 155600,



ON NEWSREEL assignments or production work, when lighting conditions are extremely poor, the natural choice is the high-speed Eastman Super-XX Negative Film, one of the family of Eastman Films, industry favorites for more than fifty years.

EASTMAN KODAK COMPANY, ROCHESTER 4, N. Y.
J. E. BRULANDER, INC. Distributors
FORT LEE, CHICAGO, HOLLYWOOD

EASTMAN
SUPER-XX...when little light is available

The Lens You Want... Always at Your Finger Tips



Only Filmo Auto Master Gives You a 3-Lens Turret Head . . . Plus Magazine Loading . . . in a 16mm Movie Camera

No other 16mm camera gives you all the advantages of pre-threaded film magazines in addition to instant positioning of any one of 3 lenses.

With viewfinder objectives also mounted on the turret, the viewfinder field automatically matches the field of the lens you select. You see what the lens sees—instantly. Eye-parallax, the usual cause of "amputated" pictures, is eliminated.

Choose the lens you want from a wide variety—speed, wide-angle, and telephoto lenses ranging from 17mm to 6 inches—all mounted to fit the Auto Master. And to give you complete versatility, you have 5 operating speeds, from normal 16 frames per second up to 64-speed for slow motion.

The film magazine makes it easy to switch film even in midroll without fogging a single frame, while the 3-dial exposure calculator gives instant readings for 324 lighting conditions.

You just sight, press a button, and what you see, you get.



FILMO AUTO LOAD

Has all the Auto Master features except the turret head. Speed range of 8 to 52 frames per second. Use the 8-speed to shoot a flashing sunset in color, and then actually see the sun set on the screen!

See the Auto Master and Auto Load at your Bell & Howell dealer's now, or, for descriptive, fully illustrated booklets, write Bell & Howell Company, 7148 McCormick Road, Chicago 43; New York 20; Hollywood 58; Washington 5, D. C.; London.

Hollywood Shows of Home

Supplement your personal films with thousands in FilmoSound Library for recreation and education . . . rental, sale, or lease. Write for newest film catalogs, free to users of motion picture equipment.



Auto Master turret head gives you instant positioning of any one of 3 lenses. The 4 inch lens gives you the widest field coverage.



Without coming from the spot, shift quickly to a 2 inch lens, and bring your subject closer like this.



Or, without changing your own position, use a 6 inch lens, and get a "real close up" like other 16mm cameras give you film plus magazine (no load)!

FILMSOUND

The new general motion picture sound system for the complete home. Shows films in real life sound film, as well as your own pictures from movies. Also includes lens, LOUDspeaker and more.



OPTICS—products combining the sciences of OPTICS • ELECTRONICS • MECHANICS

PRECISION-MADE BY

Bell & Howell

SINCE 1907 THE LARGEST MANUFACTURER OF PROFESSIONAL MOTION PICTURE EQUIPMENT FOR HOLLYWOOD AND THE WORLD